



MASSACHUSETTS
EYE AND EAR INFIRMARY



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MASSACHUSETTS
EYE and EAR INFIRMARY
ANNUAL REPORT
1961

MASSACHUSETTS EYE & EAR INFIRMARY
243 CHARLES ST., BOSTON 14, MASS.

MAR 06 1974

MASSACHUSETTS EYE & EAR INFIRMARY

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Massachusetts
Eye and Ear Infirmary

one hundred and thirty-fifth
ANNUAL REPORT

Reports for 1961
Staff and Officers for 1962

243 CHARLES STREET
BOSTON 14, MASSACHUSETTS

THE MASSACHUSETTS EYE AND EAR INFIRMARY and its Clinics serve men, women, and children from all over New England and beyond who need expert care for diseases and injuries of the eye, ear, nose, and throat. Established in 1824, and incorporated in 1827, the Infirmary is one of the two oldest hospitals in the country specializing in the preservation of good eyesight and sound hearing.

The Infirmary is a voluntary hospital—an independent, non-profit, private institution. The Board of Managers is non-paid and the Staff of specialists gives its services without charge to patients in the Clinics and to those patients who come into the hospital “on service.” The hospital receives no support from city or state but is financed by receipts from patients, by voluntary gifts and bequests, and by our allotment from the United Community Services as a “Red Feather Service.” However, the Infirmary’s quota from the United Community Services is not sufficient to cover the amount the hospital gives in “free service” to patients from the Greater Boston area who cannot pay for their own care.

In many ways the Infirmary and the Massachusetts General Hospital, its neighbor, cooperate to give complete medical service to patients. The Clinics of both hospitals share a common Admitting Office with its entrance on Fruit Street. Also, for maximum efficiency and economy, the two hospitals unite in such services as pharmacy, patients’ records and personnel.

Report of the President



In the life of every institution certain years acquire particular significance. 1961 was that kind of year at the Infirmary. The investigations undertaken and the decisions made will have a profound effect upon the future course to be followed by this great hospital in its service to the community and the nation.

An independent specialty hospital such as the Infirmary has no reason to exist unless it is qualified and equipped to produce in its specialties diagnosis and treatment superior to that provided by general hospitals. The attainment and maintenance of such high excellence calls for teaching and research programs of unusual breadth and proportion. How else can the hospital family be kept abreast of the latest development, how else can expert replacements be available to fill vacancies, and how else can there be a steady improvement in the treatment of disease?

It is obvious that the quality of our teaching and research programs depends in large measure upon access to and contact with other teachers and scientists engaged in similar pursuits. To this end the Infirmary, in teaching doctors to become Ophthalmologists and Otolaryngologists, is affiliated with the Harvard Medical School, and in research maintains association with the Harvard Medical School, with its next-door neighbor, Massachusetts General Hospital, of which incidentally it is not a part, and with other institutions including Massachusetts Institute of Technology.

In order to increase its association with others, the Infirmary during 1961 conducted an investigation to determine the feasibility of establishing a second hospital unit in the Longwood Avenue area connected with the Peter Bent Brigham Hospital and The Children's Hospital and adjacent to the Harvard Medical School. While many problems, financial and administrative, remain to be resolved, I believe the project will be undertaken because it will be of such obvious benefit both to the Infirmary and to the other hospitals.

As I have said many times, and it bears repeating, the Infirmary is wedded to the principle that quality, not quantity, shall control its research activities. To

this end, the Managers in 1961 appointed a Scientific Advisory Committee consisting of

HALLOWELL DAVIS, M.D., Chairman
Director of Research,

Central Institute for the Deaf
LUDWIG VON SALLMANN, M.D.

Director of Ophthalmic Research,
National Institute of Neurological Diseases
and Blindness

FRANCIS O. SCHMITT, Ph.D.
Institute Professor of Biology
Massachusetts Institute of Technology

This committee met at the Infirmary in October and will meet there again in the spring of 1962. In the meantime, information is being prepared for consideration by the committee in making its recommendations. It is the desire of the Managers that this committee shall play an active part in the formation of research policy at the Infirmary.

Early in 1961 the Medical Staff of the Infirmary was organized in accordance with policies adopted by the Joint Committee on the Accreditation of Hospitals and under By-Laws which provide for various committees and officers. The committees have met regularly and have performed their functions admirably. They and the first president of the Staff, Dr. Virgil G. Casten, have rendered a service of great value to the Infirmary.

On August 1, Dr. Harold F. Schuknecht assumed his duties as Chief of Otolaryngology at the Infirmary and as Walter Augustus Lecompte Professor of Otology and Professor of Laryngology at the Harvard Medical School. As the new Chief of Otolaryngology, he succeeded Dr. Philip E. Meltzer, who retired at that time after many years of devoted service in many capacities on the active staff of the Infirmary.

And, as the year ends, the Infirmary is developing plans for the conversion of its property at 90-92 Charles Street into quarters for residents and is in the process of establishing a hearing and speech clinic. It is full of vitality, is busy day and night, and is rendering more and better service than ever before. A wonderful example of a large group working together to accomplish a common purpose.

HENRY HIXON MEYER
President

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MELVILLE CHAPIN	1954
RICHARD P. CHAPMAN	1955
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*dates indicate year of appointment

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Treasurer's Report

BALANCE SHEET

October 1, 1961

ASSETS

Cash in Bank and on Hand		\$ 724,669.43
Investments — Book Value:		
Securities (Note 1)	\$4,888,502.63	
Interest in parcel of real estate	1.00	
Interest in unsettled estate	1.00	
Sealed envelopes	2.00	4,888,506.63
Accounts Receivable:		
Patients — less reserve for doubtful accounts	\$ 187,190.19	
Miscellaneous	16,053.67	203,243.86
Inventories of Supplies, etc.		48,575.08
Plant: (Note 2)		
Land and Buildings	\$3,378,737.73	
Furniture, fixtures and equipment	370,943.79	
	\$3,749,681.52	
Less: Reserve for depreciation	1,072,793.06	2,676,888.46
Construction in Progress		46,310.43
TOTAL		<u>\$8,588,193.89</u>

LIABILITIES AND FUNDS

Advances from Patients	\$ 5,002.85
Accounts Payable and Accruals	94,122.17
Special Funds	(18.12)
General Fund	1,018,274.24
General Pension Reserve	497,811.09
Permanent Funds — Income Restricted	996,534.69
Permanent Funds — Income Unrestricted	2,634,453.10
Special Purpose Funds	292,009.45
Unexpended Restricted Income of Permanent Funds	88,429.15
Temporary Funds	268,388.35
Funds Invested in Plant	2,676,888.46
Undistributed Security Gains	16,298.46
TOTAL	<u>\$8,588,193.89</u>

INCOME ACCOUNT

for the period ended October 1, 1961 (52 weeks)

Hospital Income as per Director's Report		\$2,575,124.89
Hospital Expenses as per Director's Report (including provision for depreciation — \$106,854.95) See Note		2,836,350.94
Excess of Hospital Expenses Over Hospital Income		\$ 261,226.05
Income from Investment Securities, less Income Applicable to Restricted Funds, General Pension Reserve and Temporary Funds	\$222,584.76	
Receipts from United Community Services, Committee of the Permanent Charity Fund, Inc., Estates of Elisha V. Ashton, G. Gorham Peters and Others	43,756.91	
	\$266,341.67	
Less: Treasurer's Disbursements	14,701.19	251,640.48
DEFICIT FOR THE PERIOD		<u>\$ 9,585.57</u>

NOTE: During the period, hospital operating expenses aggregating \$41,383.32 were charged directly against Permanent and Temporary Funds as follows:

Against Permanent Funds:

Principal	\$ 7,926.89	
Income	16,347.35	\$24,274.24

Against Temporary Funds

17,109.08

TOTAL

\$41,383.32

NOTES TO FINANCIAL STATEMENTS

for the period ended October 1, 1961 (52 weeks)

Note 1: As of October 3, 1960, a major portion of the investment securities of the Infirmary was organized as a "security pool", an entity having the essential characteristics of a mutual fund. Each participating fund's equity is represented by transferable shares, transactions in such shares being based on market value. The only significant effect of the pooling is that trading gains or losses are accumulated in the pool rather than distributed to principal of the General Fund as heretofore.

Note 2: In connection with the revision of the Infirmary's plant accounts and related depreciation reserves to conform with requirements of the Massachusetts Division of Hospital Costs and Finances, an additional adjustment of the reserve for depreciation applicable to the Infirmary's building accounts was made during the year under review in recognition of costs of fixed equipment included therein having a shorter useful life than that of the building taken alone. The effect of the change was a reduction in funds invested in plant as of October 2, 1960 in the amount of \$94,361.60 and a somewhat higher annual provision for depreciation.

AUDITORS' CERTIFICATE

Massachusetts Eye and Ear Infirmary
Boston, Massachusetts

We have examined the Balance Sheet of MASSACHUSETTS EYE AND EAR INFIRMARY as at October 1, 1961 and the related income account for the period ended at that date (52 weeks).

Our examination was made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the accompanying Balance Sheet and related income account, with their explanatory notes, present fairly the financial position of Massachusetts Eye and Ear Infirmary at October 1, 1961 and the results of its operations for the period ended at that date, in conformity with generally accepted accounting principles.

PATTERSON, TEELE & DENNIS

Boston, Massachusetts
December 20, 1961

SUMMARY OF INVESTMENTS

(as of September 29, 1961)

GENERAL FUND	Book Value	Market Value	% of Total Market Value
BONDS:			
U. S. Governments	\$1,518,363	\$1,516,030	16.5
Canadian Governments	53,000	50,075	.5
Railroads	152,302	116,241	1.3
Utilities	474,704	462,911	5.0
Industrials	232,551	219,122	2.4
Financial	90,798	91,791	1.0
Miscellaneous	27,902	not valued	—
TOTAL BONDS	\$2,549,620	\$2,456,170	26.7
TOTAL PREFERRED STOCKS	\$ 101,515	\$ 112,250	1.2
COMMON STOCKS:			
Railroads	\$ 116,048	\$ 277,508	3.0
Utilities	414,197	1,403,952	15.2
Industrials	1,092,863	3,206,354	34.8
Financial	290,491	740,271	8.0
Insurance Companies	201,455	797,661	8.7
Miscellaneous	25,098	55,748	.6
TOTAL COMMON STOCKS	\$2,140,152	\$6,481,494	70.3
TOTAL GENERAL FUND	\$4,791,287	\$9,049,914	98.2
WEBER FUND (Bonds)	\$ 10,500	\$ 10,191	.1
WINTHROP FUND (Bonds & Stocks)	\$ 86,715	\$ 153,390	1.7
TOTAL SECURITIES	\$4,888,502	\$9,213,495	100.0%

OPERATING ANALYSIS

for the period ended October 1, 1961 (52 weeks)

Income from Patients	\$2,688,715.91
Income from Other Sources	155,350.48
TOTAL GROSS HOSPITAL INCOME	\$2,844,066.39
Allowances to Patients for "free care"	181,958.56
Further Deductions for Bad Debts	11,082.69
Allowances to Blue Cross and Other Agencies	75,900.25
TOTAL FREE SERVICE	\$ 268,941.50
NET INCOME	2,575,124.89
Salaries and Wages	\$1,614,239.57
Supplies and Expenses	822,299.35
Clinic Expenses	292,957.07
Extraordinary Expenses	—
TOTAL OPERATING EXPENSES	\$2,729,495.99
Depreciation	\$ 106,854.95
Hospital Deficit	154,371.10
TOTAL HOSPITAL DEFICIT	\$ 261,226.05

HORACE W. FROST
Treasurer

Report of the Director



THE year ended October 1, 1961, was an eventful one in the life of the Infirmary. Some of our old problems and several new ones were solved and worthwhile progress was made on others.

Parking space has been increased substantially by eliminating the islands and blacktopping the parking area, now reached by an entrance off the Charles Street Circle opposite the jail. These changes were made possible by a new lease which permits the hospitals to charge visitors a parking fee. The hospitals, in turn, paid for the renovations. Also of interest is a comprehensive plan of the parking needs of both the M.G.H. and the Eye and Ear for the future made by Shepley, Bulfinch, Richardson, and Abbott and the Parking Associates. This statistical survey will prove invaluable in our future planning, as the parking problem is by no means solved.

During the year the hospital completed arrangements with the Metropolitan District Commission to acquire two small parcels of land adjacent to the Nurses' Residence in exchange for 1680 square feet of land taken by them in order to build the traffic circle on Charles Street.

For many years the Winthrop Foundation has provided an important clinical service in the Ear, Nose, and Throat Department, the fenestration operation having been one of its major contributions to the surgical cure of certain types of deafness. At the suggestion of the new Chief of Otolaryngology, Mr. Frederic Winthrop has reoriented the use of the funds of the Foundation toward the furtherance of research into improving surgical techniques related to deafness. Accordingly, the space formerly occupied by the Winthrop Foundation Clinic was renovated to provide a new clinic for the use of the geographic full-time staff of the Ear, Nose, and Throat Service; and additional space on the sixth floor of the Research Building was devoted to the establishment of a new Histopathology Research Laboratory, conference room, and office for the Chief. In addition, plans are underway to establish a long-needed Hearing and Speech Center through renovation and expansion of the Audiology Department. This project is being launched with the help of a grant from the Godfrey M. Hyams Trust, and application is to be made to the National Institutes of Health and the Office of Vocational Rehabilitation for the substantial additional funds needed to

complete the necessary physical changes and to staff the Center with additional qualified personnel.

The Infirmary during the year joined five other hospitals in the metropolitan area in establishing a joint laundry located on Ipswich Street. The Hospitals Laundry Association actually started operation in October, 1961 and took over the Infirmary's laundry on February 1, 1962. This joint effort is the first such undertaking in the country and is attracting considerable interest in other cities as an example of an effort to reduce cost by joint action.

FINANCIAL

Once again the total hospital income and expense reached an all-time high, and the final results showed a small loss of \$9,600 after depreciation. Depreciation was \$107,000 and free service, \$225,000. Cost per patient day increased 10 percent. It was necessary, as a result, to increase routine service rates \$2.00 per day in September.

There was some falling-off in the number of patient days during the year due to the shorter stay of patients in the hospital. The number of admissions, both in the house and the clinics, held up well and were surprisingly close to those of the previous year. Visits to the Clinics and Emergency Ward were 80,284 in 1961 as against 80,271 the year before. Admissions into the house were 9,183 as against 9,353. These comparisons are to some extent distorted by our accounting system which this year had 52 weeks versus 53 in 1960.

During the year a Research Endowment Fund was started by the Board of Managers to provide security for full-time research investigators who are at present supported by short-term government grants. It is hoped that this fund will grow substantially in the years to come.

As of October 3, 1960, a major portion of the investment securities of the Infirmary was organized as a "security pool", an entity having the essential characteristics of a mutual fund. Each participating fund's equity is represented by transferable shares, transactions in such shares being based on market value. The only significant effect of the pooling is that trading gains or losses are accumulated in the "pool", rather than distributed to principal of the General Fund, as heretofore.

The I.B.M. machines installed a year ago are

operating satisfactorily and are producing useful statistics and other accounting information which was previously unavailable. We now have the payroll, income distribution, general ledger, and accounts payable on these machines.

Blue Cross instituted a draft procedure which has greatly speeded up payments to the benefit of the cash position of the hospital. This new Blue Cross policy has been enthusiastically received by the hospitals of Massachusetts.

PATIENT SERVICES

It was with considerable regret that during the year we eliminated entirely the Occupational Therapy Department which had provided a useful service to our patients for the last 15 years. This change was entirely due to the trend towards a shorter stay of our patients — particularly the separated retina patients. In the last few years the stay of these patients has been reduced from 30 days to 7 days. The money saved by dissolving this department will be used for other services to benefit patients.

The Infirmary again participated in the pioneer Peripatology Program initiated by Boston College in 1960 under a grant from the Office of Rehabilitation. This program offers the first professional course educating specialists in the techniques of teaching the newly blinded to move again freely in the environment of their home and community and thus continue the normal pattern of their lives. For their field work, eight of these students functioned as orderlies at the Infirmary under the supervision of the Nursing Department. They performed simple services for patients, such as writing letters, escorting, reading, making beds; using these opportunities to get to know patients and observe their reactions. They also spent time in the operating rooms and clinics, and had planned discussion groups with the physicians, nurses, the chaplain, and social workers to get an understanding of how the hospital tries to help the patient with low vision to begin work on his rehabilitation problem even while still under medical treatment.

Speaking of chaplain services, during the past year the personnel of the hospital have had a growing appreciation for Chaplain Jones, who now spends more than half his time at the Infirmary. His special wisdom, personality, and ready availability to serve patients have been invaluable. Also, he has encouraged a closer bond with other chaplains who are less accessible due to their hours in the hospital, and he

has acted as liaison with the new chaplains assigned to the Infirmary.

PERSONNEL

The hospital pension plan in the light of the experience of the past five years was reviewed by the Pension Committee. After many hours of study it was decided by the Board of Managers to simplify our plan and, at the same time, to liberalize the benefits. Also, for the benefit of the employees, a pension booklet was written and distributed to the employees explaining the details of the pension plan in simplified language.

Of major importance to the hospitals in Massachusetts, real progress has been made in recent months by the various district councils of the Massachusetts Hospital Association to devise uniform personnel policies. Member hospitals in the metropolitan area, the Eye and Ear included, have signed agreements with the Boston Hospital Council to abide by stated uniform personnel policies and also to notify the Council of contemplated changes in salary ranges 45 days in advance. In this way, all information on salaries may be disseminated among the hospitals in this area. A salary committee of the Council has been formed and is active in advising hospitals on salary ranges. Also, the Massachusetts Hospital Association has improved relations with the Massachusetts Nursing Association by regular meetings with this body in order that there will be a better understanding of the problems of each group.

In spite of these improvements during the past year, there are still many needs of the Infirmary which remain unfulfilled. Cramped space is still our major problem, and we need land on which to construct new buildings to house additional beds, research laboratories, and conference rooms for teaching. An auditorium capable of seating 250, where meetings of the staff and personnel of the hospital might be held, is still one of our greatest needs. Also, with the increase in research, larger animal quarters are most desirable. At the present time we have no space available for such facilities. However, we have reason to hope that during the current year, ways may be found to permit the Infirmary to break out of its long-standing land-locked position and thus to enter upon a long-hoped-for and exciting period of growth.

FRANCIS S. HILL
Director

Comparative Statistics

HOSPITAL

	(B) 1960	(C) 1961
Service Patients—Eye Cases	1,546	1,475
Ear, Nose and Throat Cases	1,540	1,511
<i>Total Service Patients Admitted</i>	3,086	2,986
Private Patients—Eye Cases	3,381	3,189
Ear, Nose and Throat Cases	2,886	3,008
<i>Total Private Patients</i>	6,267	6,197
TOTAL PATIENTS ADMITTED	9,353	9,183
Operations, Service—Eye Cases	1,545	1,511
Ear, Nose and Throat Cases	1,295	1,273
Operations, Private—Eye Cases	3,579	3,292
Ear, Nose and Throat Cases	2,880	2,885
TOTAL OPERATIONS	9,299	8,961

CLINICS

New Patients—Eye Clinic	4,707	4,715
Ear, Nose and Throat Clinic	2,891	2,586
TOTAL NEW PATIENTS	7,598	7,301
Revisits—Eye Clinic	42,248	42,600
Ear, Nose and Throat Clinic	21,443	21,353
TOTAL CLINICAL REVISITS	63,691	63,953
Visits—Eye Clinic	46,955	47,315
Ear, Nose and Throat Clinic	24,334	23,939
TOTAL CLINICAL VISITS	71,289	71,254
Emergency Patients Admitted to Hospital	242	294
Patients Admitted to Emergency Ward	8,982	9,030

Comparative Statistics

	(B) 1960	(C) 1961
Patients Days Care—Service	19,815	17,264
Private	33,100	32,383
TOTAL PATIENTS DAYS CARE	52,915	49,647
Average Number of Patients Treated Daily—		
Service	53	47
Private	89	89
TOTAL AVERAGE TREATED DAILY	142	136
Average Number of Days Patients Remain—		
Service	6.4	5.8
Private	5.3	5.2
Beds Available and Percent of Occupancy—		
Service	66 81%	73 65%
Private	103 87%	97 92%
TOTAL BEDS AVAILABLE	169	170
Per Capita Cost Per Day—Service, Routine Care	\$24.76	\$27.54
Special Services	11.32	12.24
TOTAL COST PER DAY PER SERVICE PATIENT	\$36.08 (A)	\$39.78 (A)
Per Capita Cost Per Day—		
Semi-Private, Routine Care	\$27.51	\$30.60
Special Services	12.58	13.60
TOTAL COST PER DAY PER SEMI-PRIVATE PATIENT	\$40.09 (A)	\$44.20 (A)
Per Capita Cost Per Day—		
Private, Routine Care	\$31.63	\$35.19
Special Services	14.47	15.63
TOTAL COST PER DAY PER PRIVATE PATIENT	\$46.10 (A)	\$50.82 (A)
Condition of Patients on Discharge—Died	12	16
Autopsies	33 1/3%	50%
Discharged	9,346	9,197

(A) Overhead Ratio 27%

(B) 1960 Statistics — 53 weeks

(C) 1961 Statistics — 52 weeks



Department of Ophthalmology

I have the honor to submit to the Board of Managers my final annual report after serving 21 years as Chief of Ophthalmology. During this period, vast changes have occurred at the Infirmary in the care of patients and in the training of residents. The introduction of the antibiotics resulted in the elimination of the old isolation ward. The development of new suture materials and new surgical techniques cut down the patient's stay in the hospital appreciably, making for a much more rapid turnover and permitting a great increase in surgical admissions.

The trend toward special clinics has made itself evident here as elsewhere. First we saw the establishment of an ocular motility clinic which was followed by a retina clinic and a glaucoma consultation clinic. Now we are about to launch a corneal consultation clinic. In spite of the danger of overspecialization, there is no doubt in my mind that these special clinics, where the doctors concentrate on one branch of ophthalmology, offer the patients much better care for their particular disease. There will always be some type of general clinic for the examination of new patients and for the treatment of emergencies and minor complaints but the days of the old open ophthalmic clinic where everything was treated are numbered, in my opinion.

Revolutionary changes have also taken place in the training of residents during my regime. Since 1940 the addition of separate three-month periods in neurology, pathology, retina, and in glaucoma have added an extra year to the residency but have rounded out the resident's training immeasurably.

We are now embarked on a program of training certain young residents for academic ophthalmology, and such men will receive a total of four years' training instead of the usual three. This is made possible by a training grant from the National Institute of Neurological Diseases and Blindness. In general, the plan is to start these men in basic ophthalmic science and laboratory investigation in their first year. This is carried out in the Howe Laboratory under Dr.

Carl Kupfer, the Program Director. After a year of this, there follows the regular three year clinical residency during which the research problems initiated in the first year will be followed through.

Ophthalmic research has also gone ahead by leaps and bounds. In 1940 the Howe Laboratory was a small affair with a staff of only four workers in cramped quarters on the first floor. Now it enjoys modern laboratory facilities in the new research buildings, employs twelve full-time scientists on a permanent basis and trains a number of Special Fellows on a yearly basis.

Other research activities have sprouted. The Retina Foundation, now an independent organization, although academically affiliated with the Infirmary, has outgrown its separate quarters and is about to move into a newly constructed building.

Throughout the years, other research efforts have blossomed. The recognition and study of Retrolental Fibroplasia by Dr. Theodore Terry began here. After his death, important work was continued by Dr. Kinsey and Dr. Zacharias to elucidate the cause of this disease of premature infants. Even though the etiology was discovered elsewhere, the great effort made here contributed to our understanding of this disease.

The establishment of the Ophthalmic Plastics Laboratory recognized new concepts in the use of certain plastics for ocular prostheses and for the possible improvement of visual acuity.

The Bacteriological Laboratory has undertaken fundamental studies in the air contamination of operating rooms and has contributed much to the control of infections within the Infirmary.

With these few observations of the past, I now turn to the present and record what has been accomplished during the year.

All clinical services, centering on the Out-Patient Department, have held up well—the attendance figures being about the same as last year. This is remarkable in view of the increasing tendency of

patients to go to private doctors. It speaks well for the service they receive at the Infirmary clinic and in the wards.

The acquisition of a photocoagulator, a gift to the Infirmary by Mr. and Mrs. Frederick C. Lovejoy, has greatly facilitated the treatment of certain retinal conditions. Already 55 patients have had the benefit of this new therapeutic device.

RETINA SERVICE

The Retina Service, created by the Board of Surgeons, 13 years ago, has developed into a rather unique teaching organization under Dr. Charles Schepens. For the past several years, six to eight young ophthalmologists who had completed their residency have received at least one year of additional training at the Retina Service. This training is concentrated on the diagnosis and management of various fundus conditions, particularly retinal detachment. In addition, during the past year one Fellow has been trained in the surveying of patients with diabetic retinopathy. This work is done at the Diabetes Clinic of the Massachusetts General Hospital, which is under the direction of Doctor Richard Field. The purpose of this survey is to select and follow patients who might benefit from a section of the pituitary stalk. This new method of combating diabetic retinopathy appears to be extremely valuable in carefully chosen cases, and gives new hope for the alleviation of a condition which has been completely hopeless so far.

During the year, a total of 1,866 patients were seen on the Retina Service, of which 1,227 were operated upon. This volume provides a splendid opportunity for the training of our own residents in addition to the Special Fellows mentioned above.

GLAUCOMA CONSULTATION SERVICE

Supervision of this service passed from Dr. Robert R. Trotter to Dr. W. Morton Grant at the start of 1961, when Dr. Trotter left the Infirmary to become Professor of Ophthalmology at the University of West Virginia Medical School.

The Glaucoma Consultation Service has provided experience in the diagnosis and treatment of glaucoma to several of our residents as a formal part of their residency training in ophthalmology. From January to July of 1961, Dr. Ronald Pinkerton was Research Fellow on this service. Together, these

doctors saw and advised treatment on 317 patients who were referred from the Eye Clinic. This involved a total of 2,680 patient visits.

Newly diagnosed cases of glaucoma, and cases in which the diagnosis is uncertain or in which special study by means of tonography, gonioscopy, provocative or therapeutic tests may be helpful, are referred to the Glaucoma Consultation Service from the Eye Clinic, and are subsequently returned to the Eye Clinic with the results of their tests. An estimated two-thirds of all glaucoma patients of the Eye Clinic have now been seen in the Consultation Service. In the past year, 291 new cases of glaucoma were put on record.

Toward improvement in management of glaucoma through investigation of new means of diagnosis and treatment, and through analysis of results obtained by standard means of treatment, the Glaucoma Consultation Service has, from the start, offered excellent opportunity for clinical research. This year Dr. Pinkerton has carried out an evaluation of a new drug (guanethidine), an evaluation of a new type of tonometer (Roth Vibrotonometer), and the development of a punch-card cross-reference system for more effective analysis of information on glaucomatous patients. These research functions were



The photocoagulator's strong beam of light has greatly facilitated the treatment of certain retinal conditions.

carried out in cooperation with Dr. Grant. Also investigated were the suitability of standard solutions used in testing and treating patients, and the possibility of reducing certain irritating side-effects. Results have been beneficial to the patients.

Valued counsel, as well as helpful funds for equipment, have been generously provided by Dr. Paul A. Chandler. We hope to establish a Tonography Center to which all members of the staff may send their private patients for special study.

HOWE LABORATORY

The Annual Report of the Howe Laboratory, under Dr. David Cogan's direction, notes a considerable diversity of ophthalmic research during the past year. Some studies represented continuations of long-term projects and some were new ventures.

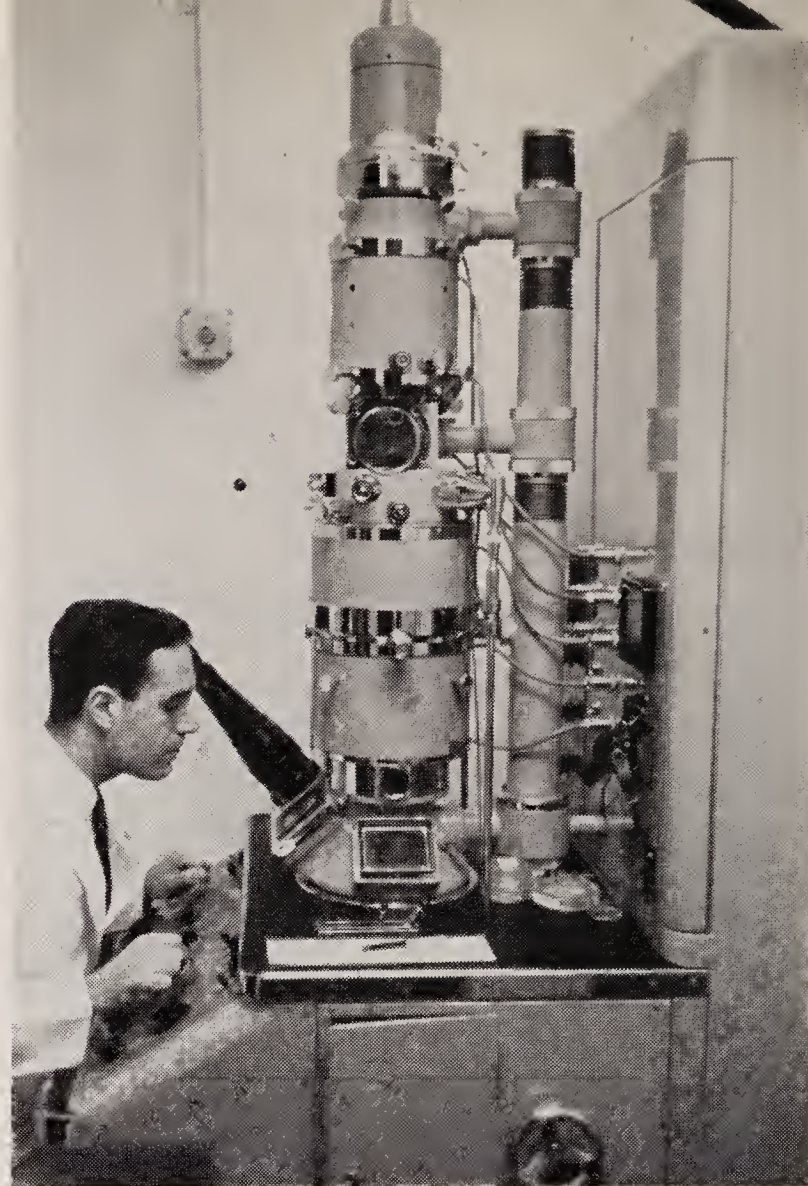
In glaucoma, special studies were undertaken on the glaucoma of infants and children; new methods were devised for measurement of the intraocular pressure and for microscopy during surgery; new drugs for the treatment of glaucoma were tested; and it was shown experimentally that vitreous in the angle of the anterior chamber could cause obstruction of the outflow channels.

Disease of the retinal vasculature was studied, using the technique previously developed in this Laboratory whereby the nonvascular components of the retina are digested away with trypsin. Especially noteworthy were the observations on diabetic retinal disease. An exhibit based on this study was awarded the Hektoen Silver Medal of the American Medical Association in June.

Biochemical studies of the eye have centered about lens metabolism, aimed ultimately at the understanding and prevention of cataracts, about some of the fundamental mechanisms in the retina and about fat formation in the cornea. These studies are described in some detail in the Laboratory's Annual Report.

What promises to be a major discovery (by Dr. Kaufman) of the past year is the therapeutic effectiveness of 5-iodo-2'-deoxyuridine in the treatment of infections with herpes simplex. This virus, which causes more loss of vision through corneal scarring than any other one agent, may for the first time be susceptible to an effective chemotherapeutic agent.

Toxicology of the eye has been a continuing interest in the Howe Laboratory, and this past year saw the completion of a text (by Dr. Grant) on



The electron microscope — capable of magnifying 200,000 times under optimum conditions — has furthered knowledge of the eye's structure in the Howe Laboratory.

toxicology of the eye. This text, due for publication in early 1962, will be the first comprehensive treatise on the subject since a German compendium in 1913.

The electron microscope installed in the Laboratory last year is in active service and is proving an invaluable adjunct to the anatomic, physiologic and pathologic studies on the eye.

Of the many other activities in the Laboratory this past year mention may be made of the continuing collaboration with the Neurology Service in the study of patients with neuro-ophthalmic conditions. Mention should also be made of the ever new developments in ocular photography (Dr. Donaldson) and the accumulation of an unparalleled collection of teaching material.

The Howe Laboratory has taken on a number of trainees who wish experience in those laboratory or clinical aspects which are available in the Howe Laboratory. A substantial part of the new quarters of the Howe Laboratory will be assigned to residents who plan to spend an additional year in training for academic ophthalmology. Although this is a service function it fits in well with the over-all research activities of the Laboratory.

RETINA FOUNDATION

The eye research program at the Retina Foundation is summarized as follows:

Dr. Balazs started electron microscope studies on the fine structure of the vitreous body and on artificial collagen gels. The interaction between hyaluronic acid and various cations in the vitreous gel and in artificial gel frameworks was also investigated.

Dr. Howe, in collaboration with Doctors T. C. Laurent and U. Laurent, found with immunoelectrophoresis that of twelve detectable protein components at least three are not present in the plasma. Carbohydrate analysis indicated that several of these are glycoproteins.

Doctors Balazs, Sweeney, and Karlin analyzed approximately 100 human subretinal fluids for macromolecular components such as proteins, glycoproteins, and hyaluronic acid. These investigations indicated a tremendous variation in the macromolecular composition of these fluids and showed the difficulties in correlating the chemical composition with the clinical findings.

Dr. Balazs studied the effect of various ions on the volume of collagen gels containing different concentrations of hyaluronic acid. Both a natural collagen gel, vitreous body, and artificial collagen gels were used. It was shown that the volume and the elasticity of these gels are greatly influenced by the type of ions present and their concentration.

Dr. Dohlman continued his studies on corneal grafting techniques and on storage procedures for lamellar grafts at the Infirmary. Dr. Martola and Dr. Dohlman studied the effect on the cornea of silicone oil in the anterior chamber.

Doctors Anseth and T. C. Laurent, using a new method for the quantitative preparation of polysaccharides of the cornea, described the various amino sugar-containing polysaccharides in the bovine cornea. They also described the molecular size and polyacid characteristics of these polysaccharides. Dr. Anseth, using this separation method, studied the variation in the polysaccharide content of the developing bovine cornea. He also made topographic and comparative biochemical studies on the corneal polysaccharides using a variety of animal species, including human. Similar studies on the regeneration of the cornea indicated that the polysaccharides in the wound area decrease quite rapidly during the

healing process, and in rabbits, even after ninety days of healing, the normal polysaccharide composition is not restored.

The role of acidic polysaccharides in the swelling of the corneal stroma was investigated by Dr. Hedbys, who found that in the mechanism of swelling, the repulsive forces between the anionic groups of the polysaccharides may play an important role.

The resistance of the corneal stroma to the flow of water was studied by Doctors Hedbys and Mishima both along and across the tissue, as well as at various degrees of hydration. The resistance to flow in the two planes was found to be similar at normal hydration, but for partially dried cornea, the resistance was higher across the tissue than along it.

The development of a new indirect ophthalmoscope, a novel instrument which eliminates corneal reflex and permits binocular visualization through a very small pupil and maximum stereopsis, has nearly been completed by O. Pomerantzeff. An apparatus for color cinematography of the fundus has been devised by W. Stenstrom and may prove of considerable assistance in the study of complex and extensive fundus pathology. A new photocoagulator has been developed by O. Pomerantzeff and D. Griffin. It has a source which can burn at a very low energy level, thereby solving the problem of heat dispersion, and its observation system is by stereoscopic indirect ophthalmoscopy.

Dr. Dobbie has studied the hypotony which generally accompanies retinal detachment and found that it probably results from lack of production of aqueous humor, rather than from an absorption of fluid by the chorio-capillary system.

Dr. Wolf studied the correlation between age and frequency of flicker over the entire visual field. Photometric studies were made on the opacities of the lens in relation to age.

OPHTHALMIC PLASTICS LABORATORY

The work of the Ophthalmic Plastics Laboratory is concentrated on the study of the anterior segment of the eye, with specific focus on problems relating to the cornea and to glaucoma.

Surgical research is being undertaken in two general areas of investigation: (1) the search for methods of correcting opacification of the cornea — by an optically satisfactory lamellar transplantation

and by corneal implantation with transparent synthetic material (in cases where the patient is not a suitable candidate for eye bank transplantation); and (2) an exploration of the use of alloplastic materials for better drainage in those glaucoma cases which are refractory to conventional treatment.

A program of basic research into wound healing and transparency of the cornea—now concerned with collagen synthesis, nucleic acid metabolism and their interrelationship—has been instituted to clarify and overcome difficulties being encountered in the surgical procedures. Farida Saad, Ph.D., and Seymour Zigman, Ph.D., are concerned with these projects.

A new clinical room for the Ophthalmic Plastics Laboratory has been established as part of the Eye Clinic. The area will be utilized for pre-operative and post-operative follow-up, and patients to have corneal transplants, plastic corneas, and glaucoma tubes. It will also be used for fitting of scleral contact lenses and for changing physical characteristics of corneal contact lenses.

Scleral contact lenses which are molded to the individual eye are being applied as therapeutic devices for scarred corneas, irregular astigmatism, corneal transplantation, etc. The lenses are made by a method adapted from the Ridley technique. Tooling for this new service is nearly complete.

Artificial drainage to reduce pressure in glaucoma has been achieved by the introduction of silicone rubber tubes into the eye. This research was initiated in the hope of helping those cases of glaucoma which do not respond to classic surgical methods. The minute tubes are formed to the eye curvatures and are designed to fixate at the desired location by means of tissue growth into tiny fenestrations. The success of these drains in the eyes of rhesus monkeys during the past three years has been satisfactory. Now, five human patients have had glaucoma drainage tubes placed in their eyes; to date, results have been encouraging.

The plastic used for glaucoma tube implantation and corneal plastic discs has received the particular attention of the laboratory, since the control of its quality, purity, and other essential properties is imperative. Svein Ore, Ph.D., a high polymers chemist, is responsible for this program. It is hoped that, with the synthesis of new polymers and the modification of the chemical structure of conventional polymers, materials even more adaptive to laboratory requirements will be developed. In par-

ticular, polymers with a higher permeability to oxygen, water, etc., than polymethyl methacrylate are being developed.

Testing of these materials with reference to optical properties, permeability and tissue tolerance continues. The latter consists of *in vitro* studies of tissue growth on their surface as well as with actual implantation experiments on animals.

Raymond Jahrling operates the Prosthetic Service in the laboratory, fitting sockets and making prostheses for patients at low cost. In 1961, 175 patients were fitted by Mr. Jahrling.

The Massachusetts Lions Eye Research Fund, the Atomic Energy Commission, the Office of Naval Research, the National Institutes of Health, as well as numerous private benefactors, continue to support the work of this laboratory.

ELECTRORETINOGRAPHY LABORATORY

The Electroretinography Laboratory, under the direction of Dr. Benjamin Ziv, has continued to make progress in both clinical and basic investigation.

The new recording technique consisting of an active gold ring electrode, adhesive, rubber-like indifferent electrodes, and a newly developed, non-conductive plastic lid holder has greatly facilitated the long-range studies being conducted here. The lid holder, originally designed for electroretinography, has general application in ophthalmology.

An additional modification of the electroretinography technique, i.e., the placement of a 1 mm bulb light stimulator directly on the cornea, is in the final development stage. This light source, with a special photocell attachment currently being devised, will aid in the standardization of electroretinography.

In collaboration with Dr. Samuel P. Hicks of the Pathology Department of Harvard Medical School, the laboratory is conducting an investigation with the objective electroretinography tests on the malformations of the mammalian retina. The malformations are induced by radiation in any given retinal layer and are reproducible. This project should yield a great deal of information in reference to the visual function of the retina.

During the past year there has been some increase in the number of clinic and private patients being referred to the Laboratory by local and out-of-state physicians as well as ophthalmologists.

ADOLPH EHRLICH PATHOLOGY LABORATORY

The Eye Pathology Laboratory continues its important function of examining enucleated eyes and correlating the findings with the clinical diagnosis. In addition, biopsies of certain tissues removed from the living eye are of crucial importance in determining the exact diagnosis.

This year, 404 biopsies were performed and 197 whole eyes were processed. Under Dr. Taylor Smith, instruction in pathologic techniques and diagnosis is given to the residents assigned there. The continued interest in, and generous support of this laboratory by Mrs. Adolph Ehrlich, is gratefully acknowledged.

THE BOSTON EYE BANK

The untimely death last spring of Dr. Edward C. Sweebee was a very great loss to the Boston Eye Bank. For six months prior to his final illness, Dr. Sweebee had been Director of the Eye Bank. He was succeeded in June by Dr. Claes-Henrik Dohlman.

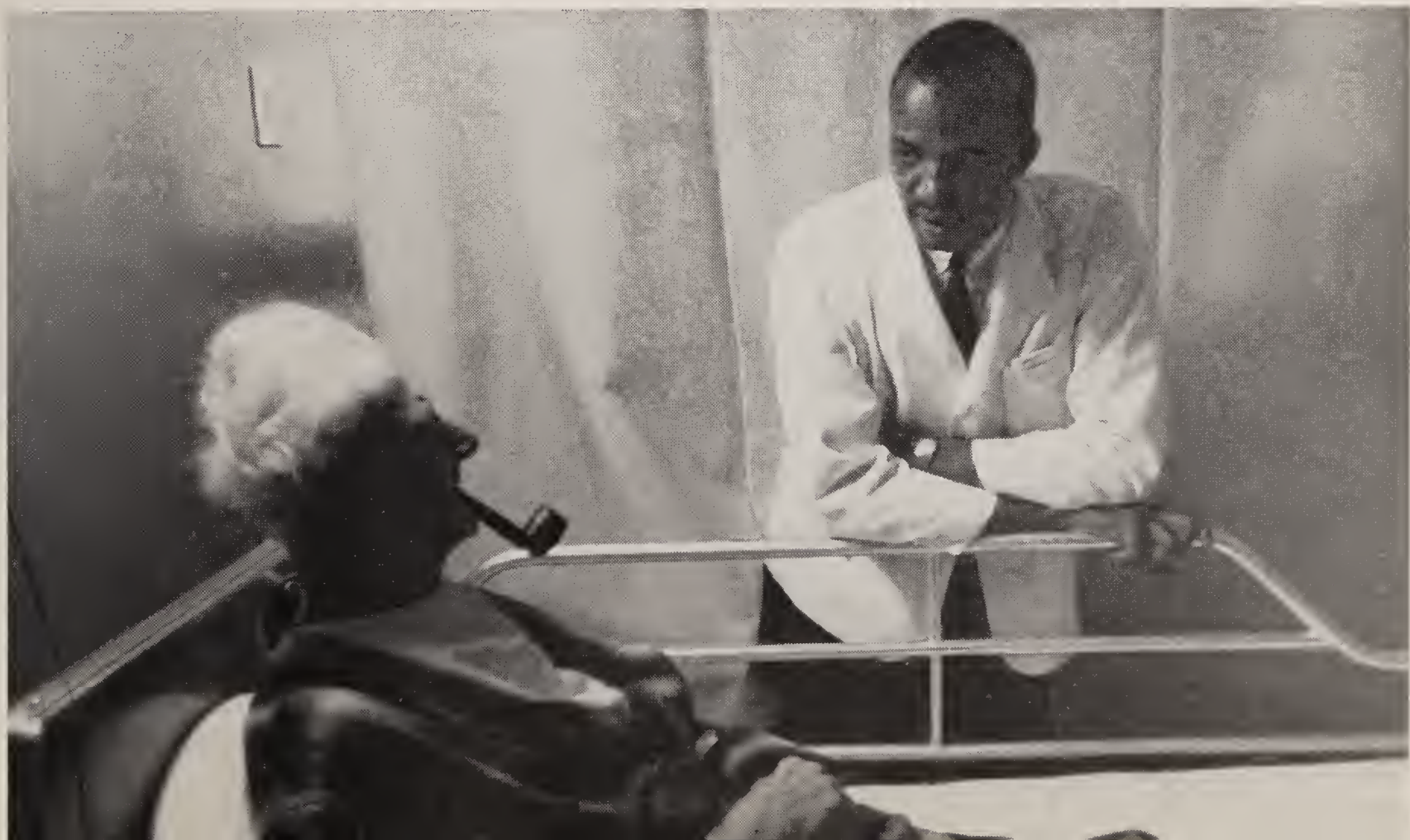
Statistics show that the Eye Bank has continued to grow at an ever-increasing rate. Within the last year a total of 377 eyes was received, more than one-third again the record number of 278 donated in the previous year. 228 of these eyes were assigned for use in corneal transplantation, as compared to 117 in 1959-1960; the remainder were given to research, as has been the policy in the past. Also within the last year, more than 4000 New Englanders registered their intention of donating their eyes after death (again more than one and one third times the equivalent figure for the previous year),

bringing the total number of individuals who have indicated such a desire to about 20,000. 21 New England hospitals completed statements of affiliation, as compared to seven in 1959-1960; there are now 137 cooperating hospitals.

This growth is largely a reflection of an extensive system of public education. A wide audience throughout New England has been reached in the past twelve months through the distribution of over 22,000 information leaflets, as well as by such means as TV and radio interviews; public service radio announcements; newspaper stories and articles; health fair displays; and the presentation of films to nearly 150 social, civic, medical and religious groups. Of particular help have been the state-wide education programs currently being conducted in both New Hampshire and Vermont by the Lions Clubs of those areas.

Plans are being made for the expansion of Eye Bank activities into new directions in the coming year. Of foremost interest is the decision of the Executive Committee to establish small fellowships for training in transplant techniques and corneal research, as funds permit. Two such fellowships, each lasting initially for a period of six months, will begin in January of 1962. A second innovation will be a different process for sterilizing eyes which are received at the Eye Bank. Still another change will stem from the Boston Eye Bank's recent affiliation

A student in Peripatology — the science of teaching the newly blinded to move with ease — visits patients at the Infirmary as part of his training.



with the Eye-Bank Association of the Americas, an association formed under the direction of the American Academy of Ophthalmology and Otolaryngology; and with the International Eye Bank, which is sponsored by Medico, Inc. Affiliation with these two organizations means that the Boston Eye Bank will work even more closely with eye banks throughout the nation, as well as endeavoring to supply surplus eye tissue for surgeons in foreign countries.

Without the generosity of many individuals and organizations, the development of the Eye Bank would not be possible. Financial aid was gratefully received last year from Mrs. Richard Cary Curtis, the Charles Irwin Travelli Fund, the Sagamore Foundation, and the Robert Treat Paine Association. The Red Cross Motor Corps, airlines, railroads and bus companies continued to supply free transportation; and vital assistance in the completion of eye donations was unselfishly provided by the staffs of our many affiliated hospitals.

SOCIAL SERVICE DEPARTMENT

The social workers on the Eye Service served 2,535 patients during the year. The number of new referrals increased about 300 patients over the previous year. Seven hundred and thirty-five patients were assisted with the purchase of eyeglasses; five with prostheses.

Glaucoma patients continue to be our major concern on the Eye Service from the standpoint of the large number needing social service help, as well as the delinquency in clinic attendance of so many of the patients. Mrs. Cantor, whose sole responsibility is for glaucoma patients, served a total of 460 patients this year.

Our three year experiment with group meetings for new glaucoma patients (supported by the National Society for the Prevention of Blindness) was an effort to find a more efficient as well as effective means of meeting our obligation to these new patients. Last year we held three series of meetings, in the fall, mid-winter and spring. Dr. Trotter led the series in the fall, and Dr. Ephraim Friedman the others — with assistance from Mrs. Cantor. Only about 25 percent of the new patients attended.

We have again enlisted the help of the National Society for the Prevention of Blindness in financing the cost of a research consultant to help us formulate a research design for a study of glaucoma patients from the social service standpoint. We have engaged a research consultant, Dr. David Kaplan, a social

work research person associated with the Harvard School of Public Health. Dr. Kaplan has brought some interesting public health concepts to our problem with glaucoma patients, which we are currently testing out in a small pilot project. We are in hopes that the results of a research project may help us to find better ways to serve glaucoma patients in the clinic. In the meantime, we will be looking for temporary measures to improve service to this patient group.

In June, 1960, a pioneer program was initiated at Boston College under the grant from the office of Vocational Rehabilitation, United States Department of Health, offering the first professional course educating specialists in the techniques of teaching the newly blinded to move again freely in the environment of their home and community and thus continue the normal pattern of their lives. The Massachusetts Eye and Ear Infirmary, in keeping with its tradition of cooperation with the community to improve services to the blind, accepted Boston College's invitation to participate in this pioneer project. Miss Shipsey served as a coordinator of the Infirmary's program for the students assisted by Dr. Garrett Sullivan, Mrs. Verrill, Chaplain Jones, Miss Hill and Miss Farnsworth. Eight students took the course and are now functioning in agencies for the blind.

No annual report is complete without a forecast of future needs. The one outstanding need is space. We need more space for current research since probably no other similar institution does as much in ophthalmic research as the Massachusetts Eye and Ear Infirmary and in such crowded quarters. We need more space for teaching, as our present facilities are cramped and our teaching effort is tremendous. One great need is some sort of auditorium where lecturers can address their audiences in suitable surroundings, using modern facilities. We need more space to expand our Howe Library of Ophthalmology. Finally, our need is more bed space and an extra operating room to relieve too great congestion in these areas. The Massachusetts Eye and Ear Infirmary has made great contributions to teaching, research, and patient care, which could be greatly augmented by more space.

EDWIN B. DUNPHY, M.D.
Chief of Ophthalmology

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Department of Otolaryngology

Since assuming the Chairmanship of the Department of Otolaryngology on July 1, 1961, I have been busy familiarizing myself with the many varied activities of the Infirmary. I have learned that the enviable record of the institution is based on the effective integration of professional service to patients, research, and medical education.

PATIENT CARE

During the year there were 23,939 clinic visits, of which 2,586 were new patients and 21,353 revisits. These out-patient services have been supervised carefully by a large visiting staff and a small full-time staff. Bed patients admitted totaled 4,519, of whom 4,158 had operations. Of these, 1,511 were service patients and 3,008 private patients. The patients were used for teaching of medical students and residents when it was appropriate to do so.

The Winthrop Foundation has been discontinued as a clinical service to patients and instead will support more basic investigations into the problems of deafness. The space formerly occupied by the Winthrop Foundation has been converted into new, modern private offices for the use of the geographic full-time staff.

Among the important services to patients are the special clinics, each under the supervision of one of our senior surgeons. These include endoscopy, tumor, plastic, and speech therapy.

Significant improvements have been made in the medical and surgical care of patients. Important techniques which the Staff of the Infirmary have been evaluating during the past year are the tissue obliteration operation for chronic frontal sinusitis and the two-stage stapedectomy procedure for advanced otosclerosis.

MEDICAL EDUCATION

Residency training in Otolaryngology is a three-year program. Prior to starting the program, one year's internship and one year general surgery residency is required. Beginning this year, five Otolaryngology residency appointments are being made instead of four. A training grant from the Public Health Department has provided equipment and stipends to insure that each resident's talents can be exploited to the fullest. The Basic Science Course for residents consists of a series of lectures and demonstrations during nine months of each year.

The Staff of the Infirmary is responsible for the teaching of Otolaryngology to the Harvard Medical Students. In addition to a lecture series given at the Harvard Medical School by various members of the Staff, the students receive clinical teaching in small groups at the Infirmary.

A rewarding educational session for the entire Staff is the weekly Clinical-Pathological Conference. An Otology Refresher Course for House and Visiting Staff was also given during the winter and spring this year, and consisted of lecture and dissection periods six mornings a week.

RESEARCH

There are currently four active basic research laboratories within the Department of Otolaryngology. In the Eaton-Peabody Laboratory of Auditory Physiology, a significant effort is being made in an investigation into stimulus coding at the periphery of the auditory system, based on the activity of single neural units in the auditory nerve and cochlear nucleus. The D. Harold Walker Laboratory of Biochemistry is studying the stereo-chemical structure of several protein compounds, particularly ribonu-

clearance, hemoglobin and myoglobin. The Microcirculatory Laboratory is studying various anatomical patterns of the microvascular system and the dynamics of blood flow. The Histopathology Laboratory is interested in the microscopic anatomy, physiology and pathology of the ear. Experiments on cats are providing information which promises to be helpful in the treatment of frontal sinus disease.

Clinical research projects include studies on metastatic disease of the larynx, techniques in otoplasty, management of surgical wounds, and reconstructive middle ear surgery.

FUTURE PLANS

The Audiology Department will be expanded in a three-stage program so that it will provide not only audiologic services to the clinic patient, but will take an active part in the rehabilitation of the hearing handicapped individual. This requires reallocation of space for a variety of specialized services, including diagnostic, therapeutic, educational, psychological, vocational, and social service.

We anticipate that a structural and administrative reorganization of the out-patient clinic will be necessary in the near future to render the clinic more adaptable to the changing picture of medical practice resulting from the impact of medical health insurance.

We look forward to initiating postgraduate training courses, when and if facilities become available, the main need being an auditorium.

A histochemical research laboratory will be activated this coming year, and plans are in progress for the establishment of an electron microscopy laboratory.

It is our ambition to continue to provide an attractive environment in which motivated and talented young men can explore and pursue the truth as it applies to Otolaryngology. The future success of the Department depends on maintaining competence and proper balance in these several activities, with the main objective of improving health standards in Otolaryngology.

HAROLD F. SCHUKNECHT, M.D.
Chief of Otolaryngology



Research investigation into the structure of the ear in the Histopathology Laboratory (above) leads toward improved surgical techniques to alleviate deafness. (below).

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October 3, 1960 — October 2, 1961

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*First author in capitals.

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A Fellow works in the Temporal Bone Dissection Laboratory, open to the Staff for individual study as part of the Otology Refresher Course.



Administration

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Assistant Director	CHARLES T. WOOD
Comptroller	RAYMOND W. LYONS

Assistant Director for Resourees and Development	SAMUEL S. DRURY
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RITA C. McCABE, R.N.

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Public Relations and Volunteers	OLGA VON K. CRAVEN
Purchasing and Stores	LEHAN POWER

Chaplain	THE REV. BRUCE JONES
--------------------	----------------------

Medical Staff

Department of Ophthalmology

Chief of Ophthalmology

EDWIN B. DUNPHY, M.D.

Consulting Chief of Ophthalmology

FREDERICK H. VERHOEFF, M.D.

Surgeons in Ophthalmology

WILLIAM P. BEETHAM, M.D.

VIRGIL G. CASTEN, M.D.

TRYGVE GUNDERSEN, M.D.

DAVID G. COGAN, M.D.

BRENDAN D. LEAHEY, M.D.

MAHLON T. EASTON, M.D.

GARRETT L. SULLIVAN, M.D.

Associate Surgeons in Ophthalmology

ALBERT E. SLOANE, M.D.

THOMAS CAVANAUGH, M.D.

EARL S. SEALE, M.D.

CARL C. JOHNSON, M.D.

HENRY F. ALLEN, M.D.

W. MORTON GRANT, M.D.

SUMNER D. LIEBMAN, M.D.

ABRAHAM POLLEN, M.D.

CHARLES L. SCHEPENS, M.D.

HARRY E. BRACONIER, M.D.

Assistant Surgeons in Ophthalmology

EDWARD E. COVITZ, M.D.

S. FORREST MARTIN, M.D.

HENRY A. MOSHER, M.D.

KARL RIEMER, M.D.

CHARLES H. MACLAUGHLIN, M.D.

FRANCIS J. WEST, M.D.

JOSEPH M. CLOUGH, M.D.

JULIAN F. CHISHOLM, JR., M.D.

RICHARD B. PIPPITT, M.D.

DAVID H. SCOTT, M.D.

TAYLOR R. SMITH, M.D.

WILLIAM STONE, JR., M.D.

FREDERIC B. BREED, M.D.

ROBERT J. BROCKHURST, M.D.

WARREN D. HALEY, M.D.

THOMAS P. CRONIN, M.D.

JOHN M. HILL, M.D.

ARTHUR M. MORRISSEY, M.D.

ICHIRO D. OKAMURA, M.D.

D. ROBERT ALPERT, M.D.

Assistants in Ophthalmology

S. ARTHUR BORUCHOFF, M.D.

ARTHUR F. CALNAN, M.D.

RICHARD B. CHAPMAN, M.D.

DAVID D. DONALDSON, M.D.

JOSEPH L. DOWLING, JR., M.D.

CARL GATES FREESE, JR., M.D.

ROBERT J. HERM, M.D.

PAUL D. HURLEY, M.D.

CARL KUPFER, M.D.

ROBERT C. LAWLOR, M.D.

BYRON S. LINGEMAN, M.D.

IRWIN T. MANCALL, M.D.

BERTHA OFFENBACH, M.D.

GEORGE M. OLIVE, JR., M.D.

IRVING L. PAVLO, M.D.

CHARLES D. J. REGAN, M.D.

HENRY J. RING, M.D.

PAUL M. RUNGE, M.D.

BARUCH J. SACHS, M.D.

ALFRED W. SCOTT, M.D.

MICHAEL WIEDMAN, M.D.

JOHN R. GEHRING, M.D.

DAVID S. JOHNSON, M.D.

JEREMY B. WHITNEY, M.D.

JOHN WALLACE McMEEL, M.D.

EPHRAIM FRIEDMAN, M.D.

EUGENE CICCARELLI, M.D.

Residents in Ophthalmology

HOWARD E. ADKINS, M.D.

CHARLES BEYER, M.D.

JOHN M. CARROLL, M.D.

RALPH W. HINCKLEY, M.D.

GEORGE M. HOWARD, M.D.

JED L. HOWARD, M.D.

HERBERT E. KAUFMAN, M.D.

ROBERT S. L. KINDER, M.D.

ARNOLD J. KROLL, M.D.

ROBERT D. REINECKE, M.D.

PERRY ROSENTHAL, M.D.

RICHARD J. SIMMONS, M.D.

DONALD R. WEIS, M.D.

Fellows in Ophthalmology

ALBERT L. ACKERMAN, M.D.

JAMES V. AQUAVELLA, M.D.

CLAES-HENRIK DOHLMAN, M.D.

FREDERICK DUSHAY, M.D.

H. MACKENZIE FREEMAN, M.D.

FRED GOTTLIEB, M.D.

B. THOMAS HUTCHINSON, M.D.

DAVID L. KNOX, M.D.

Eeva-Liisa M. MARTOLA, M.D.

ALAIN P. ROUSSEAU, M.D.

RICHARD S. RUIZ, M.D.

JOHN G. SEBESTYEN, M.D.

ANWAR SHAH, M.D.

DENIS B. SWEENEY, M.D.

WILLIAM S. TASSMAN, M.D.

JOHN M. WAPNER, M.D.

ERNST G. WOLF, PH.D.

BENJAMIN ZIV, M.D.

Department of Otolaryngology

Chief of Otolaryngology

HAROLD F. SCHUKNECHT, M.D.

Surgeons in Otolaryngology

WALTER J. E. CARROLL, M.D.
JOHN R. RICHARDSON, M.D.
JOHN R. FRAZEE, M.D.

JOSEPH LENTINE, M.D.
J. CHARLES DROOKER, M.D.
DANIEL MILLER, M.D.

Surgeon for Bronchoscopy and Esophagoscopy

JOHN R. RICHARDSON, M.D.

Surgeon for Plastic Operations

EDGAR M. HOLMES, M.D.

Surgeon for Tumor Clinic

DANIEL MILLER, M.D.

Associate Surgeons in Otolaryngology

HERMAN J. STERNSTEIN, M.D.
DONALD K. LEWIS, M.D.
JOHN E. McKEIGUE, M.D.
BERNARD ZONDERMAN, M.D.
ARAM ROOPENIAN, M.D.

CHARLES KENT, M.D.
GEORGE F. REED, M.D.
WILLIAM W. MONTGOMERY, M.D.
ROBERT E. KLOTZ, M.D.

Assistant Surgeons in Otolaryngology

ELIZABETH DeBLOIS, M.D.
KENNETH A. KAZANJIAN, M.D.
WILLIAM P. ROGERS, JR., M.D.

HUGO D. ANGELINI, M.D.
LOUIS E. GRIFFEY, M.D.
SIDNEY R. WILKER, M.D.

Assistants in Otolaryngology

FRANK W. BRADY, M.D.
WILLIAM L. HAYDEN, M.D.
LAWRENCE S. HIRSCH, M.D.
ALFRED L. HURST, M.D.
GEZA JAKO, M.D.
DAVID L. PIERCE, M.D.
DANIEL J. REAGAN, M.D.

MENDELL ROBINSON, M.D.
SYDNEY SHORE, M.D.
MORRIS SWARTZ, M.D.
JOHN C. TRAKAS, M.D.
ALBERT WEISER, M.D.
ALBERT H. WILLIAMS, M.D.
GEORGE H. WILLIAMS, M.D.

Residents in Otolaryngology

YALE J. BERRY, M.D.
LAWRENCE R. BOIES, JR., M.D.
ALLAN G. EDWARDS, JR., M.D.
SHIRO FUJITA, M.D.
WERNER D. CHASIN, M.D.
RICHARD R. GACEK, M.D.
FLOYD B. GOFFIN, M.D.

ROY A. JOHNSON, M.D.
DONALD G. KEAMY, M.D.
ROBERT H. LOFGREN, M.D.
FREDERIC W. PULLEN, II, M.D.
S. HAROLD REUTER, M.D.
JOHN B. ROBERTS, M.D.
EDWARD F. SHAVER, JR., M.D.

Fellows in Otolaryngology

MAKOTO IGARASHI, M.D.
ISAMU SANDO, M.D.

HEINRICH H. SPOENDLIN, M.D.
TAKESHI WATANABE, M.D.

Research Associates in Otology

WALTER A. ROSENBLITH, ING. RAD.
HIMLI ARSLAN, M.S.
WALTER S. BURRAGE, M.D.
ROBERT S. KIMURA

Research Assistant in Otology

NELSON Y-S. KIANG, PH.D.

Electronics Engineers in Otology

ROBERT M. BROWN, B.S.
ALAN CRIST, B.S.
DONALD F. O'BRIEN, E.E.

Director of Ophthalmic Pathology

TAYLOR R. SMITH, M.D.

Assistant Ophthalmic Pathologist

TOICHIRO KUWABARA, M.D.

Directors of Otolaryngological Pathology

WERNER MUELLER, M.D.

KAROLY BALOGH, JR., M.D.

Director of Anesthesiology

JOHN C. SNOW, M.D.

Fellows in Anesthesiology

PACITA M. S. ALVAREZ, M.D.

LORAND S. BECSEY, M.D.

RANIERO DIPIERO, M.D.

MICHIKO HARANO, M.D.

ISMAILE S. SENSEL, M.D.

Director of Radiology

ALEXANDER S. MACMILLAN, JR., M.D.

Bacteriologist

ANITA MANGIARACINE, A.B.

Biologist

LEONA ZACHARIAS, PH.D.

Biochemists

ENDRE A. BALAZS, M.D.

SIDNEY FUTTERMAN, PH.D.

JACQUES GOSTELI, PH.D.

JIN KINOSHITA, PH.D.

S. PETER MARFEY, PH.D.

HERBERT NOWAK, PH.D.

MARGARITA NOWAK, PH.D.

KLAUS SCHIERRER, PH.D.

SEYMOUR ZIGMAN, PH.D.

Research Associate in Biochemistry

MAYO UZIEL, PH.D.

*Director of Pharmaceutical Research
and Manufacturing*

JOHN T. MURPHY, PH.D.

Director of Pharmacy

JOHN WEBB

Ophthalmic Research Committee

EDWIN B. DUNPHY, M.D.

TRYGVE GUNDERSEN, M.D.

HENRY F. ALLEN, M.D.

Associate Director of Ophthalmic Resident Teaching

PAUL A. CHANDLER, M.D.

*Director of the Glaucoma
Consultation Service*

W. MORTON GRANT, M.D.

Director of the Retina Service

CHARLES L. SCHEPENS, M.D.

*Geographic Full-Time Staff for the
Department of Otolaryngology*

HAROLD F. SCHUKNECHT, M.D.

GEORGE H. WILLIAMS, M.D.

WILLIAM W. MONTGOMERY, M.D.

WERNER D. CHASIN, M.D.

Director of Audiology

ALBERT W. KOCH, Ed.D.

Director of Esophageal Voice Classes

MRS. PAUL A. DOEHLER

BOSTON EYE BANK

Serving New England

General Director — CLAES-HENRIK DOILMAN, M.D.

Executive Secretary — CYNTHIA P. BURNS

Executive Committee

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EDWIN B. DUNPHY, M.D.

WESTON HOWLAND, JR.

BRENDAN D. LEAHEY, M.D.

HENRY HIXON MEYER

MRS. WILLIAM A. SLADE, JR.

Research

Department of Ophthalmology

HOWE LABORATORY OF OPHTHALMOLOGY

DAVID G. COGAN, M.D.

OPHTHALMIC PLASTICS LABORATORY

WILLIAM STONE, JR., M.D.

ELECTRORETINOGRAPHY LABORATORY

BENJAMIN ZIV, M.D.

RETROLENTAL FIBROPLASIA LABORATORY

JULIAN F. CHISHOLM, JR., M.D.

LEONA ZACHARIAS, PH.D.

Department of Otolaryngology

EATON-PEABODY LABORATORY OF AUDITORY PHYSIOLOGY

WALTER A. ROSENBLITH, ING. RAD.

NELSON Y-S. KIANG, PH.D.

D. HAROLD WALKER LABORATORY OF BIOCHEMISTRY

S. PETER MARFEY, PH.D.

MICROCIRCULATORY LABORATORY

JOHN W. IRWIN, M.D.

HISTOPATHOLOGY LABORATORY

HAROLD F. SCHUKNECHT, M.D.

TEMPORAL BONE LABORATORY

GEORGE KELEMEN, M.D.

Senior Consulting Surgeons

OPHTHALMOLOGY

RALPH H. RUGGLES, M.D.
MERRILL J. KING, SR., M.D.

BENJAMIN SACHS, M.D.
PAUL A. CHANDLER, M.D.

Senior Consulting Ophthalmic Pathologist

PARKER HEATH, M.D.

OTOLARYNGOLOGY

D. HAROLD WALKER, M.D.
FREDERICK L. BOGAN, M.D.
EDWARDS W. HERMAN, M.D.
PHILIP MYSEL, M.D.
LYMAN G. RICHARDS, M.D.
MOSES H. LURIE, M.D.
ROBERT L. GOODALE, M.D.

CARL H. ERNLUND, M.D.
CHARLES H. ALLMAN, M.D.
MAURICE G. EVANS, M.D.
LEROY A. SCHALL, M.D.
PHILIP E. MELTZER, M.D.
FRANCIS L. WEILLE, M.D.
VINCENT J. KELLEY, M.D.

Senior Research Consultant for Otolaryngology

GEORGE KELEMEN, M.D.

Senior Consulting Surgeon for Plastic Operations

VARAZTAD H. KAZANJIAN, M.D.

Senior Consulting Roentgenologist

ALEXANDER S. MACMILLAN, M.D.

The members of the Staff of the Massachusetts General Hospital are Consultants to the Infirmary, and in this capacity, become a part of the Staff of the Massachusetts Eye and Ear Infirmary.

1962 Service Awards

Twenty Year Pin

Doris Bassett

ENT Clinic

Ten Year Pin

Urel Butler
Housekeeping

Gerald Maloney
Nursing

Mary Dragon
Housekeeping

Agnes Patten
Nurses' Residence

Rodger Lane
Nursing

Barbara Smith, R.N.
Nursing

Helen Lang
Nursing

Ruth Straitiff
Admitting Officer

The Directory, listing members of the Massachusetts Eye and Ear Infirmary Staff, Alumni and Residents, will be published under separate cover.

In Memoriam

GUSTAVE B. FRED, M.D.

Senior Consulting Surgeon in Otolaryngology

January 19, 1895 — November 26, 1961

1925—Aural House Officer

1926—Clinical Assistant in Otolaryngology

1932—Assistant Surgeon in Otolaryngology

1940—Associate Surgeon in Otolaryngology

1944—Surgeon in Otolaryngology

1948—Senior Consulting Surgeon in Otolaryngology

EDWARD C. SWEEBE, M.D.

Assistant in Ophthalmology

September 4, 1929 — May 9, 1961

1956—Resident in Ophthalmology

1959—Fellow in Ophthalmology

1960—Assistant in Ophthalmology



MASSACHUSETTS
EYE AND EAR INFIRMARY

ANNUAL REPORT • 1962

THE MASSACHUSETTS EYE AND EAR INFIRMARY and its Clinics serve men, women, and children from all over New England and beyond who need expert care for diseases and injuries of the eye, and of the ear, nose, and throat. Established in 1824, and incorporated in 1827, the Infirmary is one of the two oldest hospitals in the country specializing in the preservation of good eyesight and sound hearing.

The Infirmary is a voluntary hospital — an independent, non-profit, private institution. The Board of Managers is non-paid and the Staff of specialists gives its services without charge to patients in the Clinics and to those patients who come into the hospital “on service.” The hospital receives no support from city or state but is financed by receipts from patients, by voluntary gifts and bequests, and by our allotment from the United Community Services as a “Red Feather Service.” However, the Infirmary’s quota from the United Community Services is far below the amount the hospital gives in “free service” to patients from the Greater Boston area who cannot pay for their own care.

Though they are separate institutions, the Infirmary and its neighbor, the Massachusetts General Hospital, cooperate to give complete medical service to patients. The Clinics of both hospitals share a common Admitting Office with its entrance on Fruit Street.

The cover photograph depicts microsurgery on the middle ear. There are observation tubes on the microscope so that assistants and onlookers can share the surgeon’s view. The various procedures of microsurgery as well as gross surgery in otolaryngology can now be demonstrated to groups through closed circuit television recently installed at the Infirmary.

MASSACHUSETTS
EYE AND EAR INFIRMARY

One Hundred and Thirty-sixth
ANNUAL REPORT

Reports for 1962
Staff and Officers for 1963

Corporation

WALTER H. TRUMBULL	1929*
ROBERT F. BRADFORD	1934
WILLIAM A. PARKER	1935
HENRY HIXON MEYER	1937
MRS. RICHARD CARY CURTIS	1940
HORACE W. FROST	1940
HON. EDMUND V. KEVILLE	1942
FREDERIC WINTHROP	1943
MRS. SULLIVAN A. SARGENT	1945
WILLIAM H. CLAFLIN, III	1947
MRS. JOHN W. FARLEY	1948
WILLIAM F. KEESLER, JR.	1948
ARTHUR T. LYMAN	1948
THE REV. ROBERT G. METTERS	1948
AUGUST R. MEYER	1948
MISS AMELIA PEABODY	1948
HON. LEVERETT SALTONSTALL	1948
FREDERICK H. VERHOEFF, M.D.	1948
NATHANIEL FAXON, M.D.	1949
FRANCIS W. HATCH, JR.	1951
ROBERT H. HOPKINS	1951
GEORGE L. PEW	1951
HOWLAND S. WARREN	1951
GEORGE A. McLAUGHLIN	1952
HENRY K. PORTER	1952
MRS. FRANCIS T. HUNTER	1953
MRS. VARAZTAD H. KAZANJIAN	1953
MELVILLE CHAPIN	1954
RICHARD P. CHAPMAN	1955
WILLIAM EHRLICH	1955
RICHARD HARTE, SR.	1955
WESTON HOWLAND, JR.	1955
ARTHUR L. SHERIN	1955
WILLIAM L. SALTONSTALL	1957
LESLIE SOULE	1957
MRS. WALTER C. DODGE	1963

*dates indicate year of appointment

Board of Managers

HENRY HIXON MEYER,
President

HORACE W. FROST,
Treasurer

HON. EDMUND V. KEVILLE,
Secretary

MELVILLE CHAPIN
WILLIAM H. CLAFLIN, III
MRS. RICHARD CARY CURTIS
MRS. JOHN DANE, JR.*
MRS. JOHN W. FARLEY
MRS. FOSTER FURCOLO*
ROBERT H. HOPKINS
WILLIAM A. PARKER
MRS. SULLIVAN A. SARGENT
WALTER H. TRUMBULL
FREDERIC WINTHIROP

*appointed by the Commonwealth

DIRECTOR

FRANCIS S. HILL

CHIEFS OF SERVICE

DAVID G. COGAN, M.D.
Ophthalmology

HAROLD F. SCHUKNECHT, M.D.
Otolaryngology



Report of the President

The Infirmary enters its one hundred and thirty-sixth year as an incorporated specialty hospital with all the enthusiasm, vigor and ambition of youth set in a framework of technical knowledge and skills gained as the result of research and experience. The reports of the Director and the two Chiefs which follow this report warrant careful study. They demonstrate an awareness of the importance of their assignments, describe many of the problems with which the Infirmary is faced and disclose a determination, as well as the ability, to achieve solutions. It is fortunate, indeed, that the two specialties of the Infirmary will be directed by men of such stature during the dramatic period of expanding medical knowledge which lies ahead.

All of us are conscious of the unfortunate fact that the per diem cost of hospital care, at the Infirmary and elsewhere, has risen sharply in recent years. We are also convinced that it is bound to rise still further. The causes are obvious: increasing wages and mounting costs for every article and service used by hospitals. They can be controlled to some extent by the fullest possible use of hospital facilities and by strict control of expenditures but they cannot be overcome except, perhaps, by some drastic change in hospital care.

Enlarged medical knowledge and improved technology in the treatment of disease, both acquired, incidentally, through research, have in the case of the Infirmary over the past ten years resulted in a rapid return of many patients to ambulatory status. This, and the fact that there are always some patients in the hospital for observation, tests and medical treatment who are not sick in the sense

that they require nursing care or need to occupy a hospital bed, point to the importance of creating adjacent to the Infirmary a unit, akin to a motel, to accommodate ambulatory patients, with members of their families when desired. Supervision would be provided by a minimum of personnel, patients would eat their meals in the cafeteria and receive in the hospital or out-patient department the services they require and the staff and facilities of the Infirmary would at all times be readily available to care for every development and to meet any emergency.

Many advantages would result from an ambulatory facility. The cost of caring for patients should be substantially less than the cost in the hospital; more patients could be cared for in the hospital; and patients who do not need hospital care would be freed from the psychological effects of close association with the sick.

A recent study (December 1962) undertaken for the City of Boston and the Boston Redevelopment Authority by Mr. Julian H. Levi of Chicago, a recognized authority on municipal-institutional relations, describes the future of the Boston hospitals as follows:

“The medical institutions in the City of Boston will have to continue serving greater and greater numbers of patients, will have to increase the numbers of medical students and student nurses they train in order to meet national needs, and will have overwhelming demands for new research facilities in continuing the medical breakthroughs of the past decades. These institutions will require more space. . . .



9,678 patients were admitted to the Infirmary this year — and 9,589 operations were performed. Crowded conditions will prevail until more space can be found for beds and for surgical suites.

‘Thus, institutional expansion which occurred in the last decade can be expected to continue in the next decade and as a matter of national, state and area necessity the services the institutions provide must be recognized.’

The Infirmary is no exception. Currently its need for space is acute: space for more beds, for more research, for more residents studying its services and for enlarged facilities in every category. A new research building on the lot adjoining the nurses’ home would, at least temporarily, meet the demand for research space. Space for expansion of other facilities is the major problem. This is receiving the concentrated attention of the administration. Hopefully, a solution will be forthcoming in 1963.

Finally, I feel that my intimate association with the Infirmary qualifies me to report that the esprit of the entire family has never been higher. With such a team and our wholehearted support we need have no fears for the future.

HENRY HIXON MEYER
President

Patients wait to be examined in one of the Infirmary’s clinics on a typical weekday morning. 71,254 visits were made to the two large clinics and their many sub-divisions last year.





Treasurer's Report

BALANCE SHEET

September 30, 1962

ASSETS

Cash in Bank and on Hand		\$ 880,115.08
Investments — Book Value:		
Securities	\$5,636,357.10	
Interest in parcel of real estate	1.00	
Interest in unsettled estate	1.00	
Sealed envelopes	2.00	5,636,361.10
Accounts Receivable:		
Patients — less reserve for doubtful accounts — \$38,640.09	\$ 189,719.02	
Miscellaneous	4,151.48	193,870.50
Inventories of Supplies, etc.		44,579.22
Plant:		
Land and Buildings	\$3,416,971.60	
Furniture, fixtures and equipment	427,008.02	
	\$3,843,979.62	
Less: Reserve for depreciation	1,191,381.68	2,652,597.94
Construction in Progress		13,296.21
TOTAL		<u>\$9,420,820.05</u>

LIABILITIES AND FUNDS

Advances from Patients	\$ 5,161.00
Accounts Payable and Accruals	106,066.17
Special Funds	7,253.90
General Fund	536,905.04
General Pension Reserve	558,509.77
Permanent Funds — Income Restricted	1,370,802.48
Permanent Funds — Income Unrestricted	2,705,346.15
Special Purpose Funds	360,383.18
Unexpended Restricted Income of Permanent Funds	87,922.38
Temporary Funds	811,638.00
Funds Invested in Plant	2,652,597.94
Plant Depreciation Fund	119,827.38
Undistributed Security Gains	98,406.66
TOTAL	<u>\$9,420,820.05</u>

INCOME ACCOUNT

for the period ended September 30, 1962 (52 weeks)

Hospital Income as per Director's Report		\$2,920,677.77
Hospital Expenses as per Director's Report — (including provision for depreciation — \$119,827.38)		3,062,400.62
Excess of Hospital Expenses Over Hospital Income		\$ 141,722.85
Income from Investment Securities, less Income Applicable to Restricted Funds, General Pension Reserve and Temporary Funds	\$223,863.57	
Receipts from United Community Services, Estates of Elisha V. Ashton, G. Gorham Peters and Others	31,477.49	
	\$255,341.06	
Less: Treasurer's Disbursements	15,924.69	239,416.37
SURPLUS FOR THE PERIOD		<u><u>\$ 97,693.52</u></u>

NOTE: During the period, hospital operating expenses aggregating \$100,181.15 were charged directly against Permanent and Temporary Funds as follows:

Against Permanent Funds:

Principal	\$ 8,266.58	
Income	49,235.08	\$ 57,501.66

Against Temporary Funds:

	42,679.49	
TOTAL		<u><u>\$100,181.15</u></u>

AUDITORS' CERTIFICATE

Massachusetts Eye and Ear Infirmary
Boston, Massachusetts

We have examined the balance sheet of Massachusetts Eye and Ear Infirmary as at September 30, 1962 and the related income account for the period ended at that date (52 weeks).

Our examination was made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the accompanying balance sheet and related income account present fairly the financial position of Massachusetts Eye and Ear Infirmary at September 30, 1962 and the results of its operations for the period ended at that date, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding period.

PATTERSON, TEELE & DENNIS

Boston, Massachusetts
December 17, 1962

SUMMARY OF INVESTMENTS

(as of September 28, 1962)

GENERAL FUND	Book Value*	Market Value*	% of Total Market Value
BONDS:			
U. S. Governments	\$1,943,143	\$1,948,135	22.1
Canadian Governments	53,000	51,350	0.6
Railroads	152,301	117,935	1.3
Utilities	532,171	526,772	6.0
Industrials	326,329	320,051	3.6
Financial	90,797	93,515	1.1
Miscellaneous	31,900	not valued	—
TOTAL BONDS	<u>\$3,129,641</u>	<u>\$3,057,758</u>	<u>34.7</u>
TOTAL PREFERRED STOCKS	\$ 101,515	\$ 114,170	1.3
COMMON STOCKS:			
Railroads	\$ 116,048	\$ 229,806	2.6
Utilities	416,799	1,196,131	13.6
Industrials	1,245,891	2,836,514	32.2
Financial	297,116	612,872	6.9
Insurance Companies	203,981	572,478	6.5
Miscellaneous	25,097	50,791	0.6
TOTAL COMMON STOCKS	<u>\$2,304,932</u>	<u>\$5,498,592</u>	<u>62.4</u>
TOTAL GENERAL FUND	<u>\$5,536,088</u>	<u>\$8,670,520</u>	<u>98.4</u>
WEBER FUND (Bonds)	\$ 10,500	\$ 10,235	0.1
WINTHROP FUND (Bonds & Stocks)	\$ 90,760	\$ 133,631	1.5
TOTAL SECURITIES	<u><u>\$5,637,348</u></u>	<u><u>\$8,814,386</u></u>	<u><u>100.0%</u></u>

*cents omitted.

OPERATING ANALYSIS

for the period ended September 30, 1962 (52 weeks)

Income from Patients	\$3,027,838.41
Income from Other Sources	161,739.33
TOTAL GROSS HOSPITAL INCOME	3,189,577.74
Allowances to Patients for "free care"	163,425.29
Further Deductions for Bad Debts	5,551.49
Allowances to Blue Cross and Other Agencies	99,923.19
TOTAL FREE SERVICE	<u>268,899.97</u>
NET INCOME	<u>2,920,677.77</u>
Salaries and Wages	1,637,514.93
Supplies and Expenses	963,947.89
Clinic Expenses	354,607.91
TOTAL OPERATING EXPENSES	<u>2,956,070.73</u>
Depreciation	106,329.89
Hospital Deficit	<u>35,392.96</u>
TOTAL HOSPITAL DEFICIT	<u><u>141,722.85</u></u>

HORACE W. FROST
Treasurer

Report of The Director



THIS is the sixteenth annual report I have written as Director of the Infirmary. These reports have two purposes: first, to review briefly the more important events of the past year, and second, to provide a historical record of the development of the Infirmary over the years. During the past decade and a half the main emphasis has been, as it should be, on quality of patient care. While a great many important improvements have been made in the physical facilities of the Infirmary during that time, the actual number of beds has not been increased because of our restricted location. This has forced us to use to the utmost every square foot of available space in our present buildings. From a financial point of view it has resulted in a relatively efficient operation, and thus the Infirmary has been able to operate without large deficits during this period.

Nevertheless, it is interesting to note that with about the same number of beds, admissions to the hospital in 1962 were one-third greater than they were 15 years ago. This is due mainly to the substantial reduction in the length of patient stay in the Infirmary from an average of $7\frac{1}{2}$ days in 1947, to an average of just over 5 days in 1962. However, during the past year, the pressure on the Admitting Office to provide enough beds and operating time to meet the rising demands of our staff has become increasingly severe. It is now imperative that we expand all phases of Infirmary activity: increase our capacity for patient care with more beds and operating rooms, and provide more space for expanding research and for the Infirmary's heavy teaching load.

It is, therefore, encouraging to report progress during 1961-62 in our planning for future expansion. Initially, two projects within our present building have been authorized. The first of these is the constructing and equipping of an additional eye operating room. When this has been completed shortly

after the first of the year, the total number of operating rooms in the Infirmary will be ten, which should help to handle the increasing demand for operating time. The second project will be the renovation of the Dietary Department into a centralized system with all food completely processed in the main kitchen. From there the food, kept hot by special heat storage pellets, will be served directly to the patients, bypassing the present floor kitchens. The space now occupied by the four floor kitchens will be used to provide six additional semi-private beds and a new isolation unit. We anticipate that the very substantial cost of this installation can be amortized over five years through the more efficient use of personnel and the added income from the six additional beds. In any case, it will provide better food service for our patients.

During this year, the small piece of property at 90-92 Charles Street was sold since it had become clear that its location and the applicable zoning restrictions made it unsuitable for worth-while renovation for Infirmary purposes. About the only land which the Infirmary now owns on which there is no useful building is the small parking lot adjacent to the Nurses' Residence at 14 Embankment Road. In 1962, plans for a new six-story research building to be erected on this plot were drawn and an application for Government funds on a matching basis was made to the National Institutes of Health to finance the \$2,000,000 cost. We have received word that our application has been approved; but at this writing, it is not known when the Federal funds will be made available to us. However, the completion of this building would more than double our total research space and the Infirmary would be committed to a total research operation, two years after completion of the building, involving double the present number of research personnel and double the present

annual research budget of approximately \$850,000. Of this important sum, by far the largest part is provided by the National Institutes of Health and other granting agencies. However, like all institutions conducting medical research, the Infirmary is experiencing a growing demand on its resources for research costs not fully reimbursed by grants, and in the past year the Infirmary paid some \$80,000 for research out of its own funds.

During the past year there have been several important changes in the Federal support of research, namely, the increase in the maximum overhead allowance from 15 per cent to 20 per cent of direct costs, and the recent eligibility of hospitals including the Infirmary for the so-called General Research Support Grant based on a percentage of the total amount of research being carried on by the institution. The added Government assistance anticipated for otherwise unreimbursed research costs is potentially very important.

In addition to these favorable developments, the Infirmary has substantially increased its Research Endowment Fund which, as time goes on, will become more and more important in providing the long-term security so necessary to attract and hold talented full-time investigators.

The most provocative planning of all, though further in the future, is the progress made in the formation of the Affiliated Hospitals Center, Inc.

to be located in the Longwood area and in which the Infirmary expects to have a part.

Operations for the year were on a satisfactory basis and resulted in a surplus after depreciation. The Infirmary has just adopted the policy of funding its depreciation since it is believed that to do so conforms with the best business practice. Since relatively few hospitals have so far adopted this step, the Infirmary has taken a position of leadership in this vital matter which is receiving serious study by the American Hospital Association.

For the first time in its history the expenses of the Infirmary crossed the \$3,000,000 mark. In line with other teaching hospitals in the community, the Infirmary raised its room rates \$2 per day at the beginning of the year and in July, increased clinic rates from \$3.50 to \$4.50 per visit. Hospitals, more than any other group of institutions, have been caught in the inflation spiral of recent years. With services around the clock, seven days a week, salaries and wages now amount to 68 per cent of total expenses. There is no easy way to control these expenses as it is imperative that hospitals pay wages and provide fringe benefits which will attract qualified personnel in competition with the local industrial labor market. I am pleased to report that in recent years Massachusetts hospitals have made giant strides in improving their personnel policies and practices. Nurses' salaries were increased sub-



The Gift Cart is wheeled to the patient floors by members of the Ladies Visiting Committee five afternoons a week.

stantially in September, and the Massachusetts minimum wage of \$1.20 per hour for other personnel went into effect in October. This law also provides for a minimum of \$1.25 per hour to become effective in April, 1963. In the face of these increases, the cost per patient day was held to a 2 per cent increase because of increased occupancy.

I cannot close this report without mentioning the great strides made by the Volunteer Program at the Infirmary in the past year as shown by the steadily increasing demands of the various departments for volunteers to supplement paid staff. Volunteers work every day throughout the Infirmary; in the clinics, the Admitting Office, the front desk, the children's wing, the laboratories, as messengers for the nursing service and last, but not least, as patient visitors. In 1961-1962, 188 individual volunteers gave the Infirmary a total of 7,963 hours of volunteer service. More than half the number of volunteers are members of the Ladies Visiting Committee, which has as its special project the operation of the Gift Shop established in 1956. Since that time, more than \$125,000 worth of merchandise has been sold, and last year with an average attendance of 33

members of the Ladies Visiting Committee a month, a total of more than 4,000 volunteer hours of duty in the Gift Shop was recorded. The strength and importance of the Ladies Visiting Committee in the overall operation of the hospital cannot be overemphasized. The substantial contribution of this group in time and money is regarded by the Board of Managers as one of the Infirmary's greatest assets. The Administration is anxious to encourage their participation in the affairs of the hospital and would welcome an expansion of their numbers in the years to come.

The Infirmary, like most hospitals, is always on the lookout for ways to improve efficiency and to make use of modern automation. However, at the patient's bedside there is no mechanical substitute for the ministrations of the trained nurse, the dedicated social worker, or the volunteer visitor. To them and to the many other behind-the-scenes workers with whom the patient may never be in direct contact, I am glad to extend the grateful thanks of the Administration.

FRANCIS S. HILL
Director

1963 Service Awards

Medical Staff — Twenty-Five Years

GARRETT L. SULLIVAN, M.D.
Surgeon in Ophthalmology

ALBERT E. SLOANE, M.D.
Associate Surgeon in Ophthalmology

S. FORREST MARTIN, M.D.
Assistant Surgeon in Ophthalmology

Twenty Year Pins

MADELINE S. SHIPSEY
Director of Medical Social Service

ANNA SARDINA
Nursing

Ten Year Pins

LENA BOWLING
Dietary

JOHN EVANS
Dietary

CLAIRE FOLEY
Nursing

E. JOANNE PERKINS
Howe Laboratory

Comparative Statistics

HOSPITAL

	1961	1962
Service Patients—Eye Cases	1,475	1,434
Ear, Nose and Throat Cases	1,511	1,297
<i>Total Service Patients Admitted</i>	2,986	2,731
Private Patients—Eye Cases	3,189	3,409
Ear, Nose and Throat Cases	3,008	3,538
<i>Total Private Patients</i>	6,197	6,947
TOTAL PATIENTS ADMITTED	9,183	9,678
Operations, Service—Eye Cases	1,511	1,467
Ear, Nose and Throat Cases	1,273	1,101
Operations, Private—Eye Cases	3,292	3,671
Ear, Nose and Throat Cases	2,885	3,350
TOTAL OPERATIONS	8,961	9,589

CLINICS

New Patients—Eye Clinic	4,715	4,615
Ear, Nose and Throat Clinic	2,586	2,764
TOTAL NEW PATIENTS	7,301	7,379
Revisits—Eye Clinic	42,600	42,993
Ear, Nose and Throat Clinic	21,353	19,106
TOTAL CLINICAL REVISITS	63,953	62,099
Visits—Eye Clinic	47,315	47,603
Ear, Nose and Throat Clinic	23,939	21,870
TOTAL CLINICAL VISITS	71,254	69,478
Emergency Patients Admitted to Hospital	294	359
Patients Admitted to Emergency Ward	9,030	8,842

Comparative Statistics

	1961	1962
Patients Days Care—Service	17,264	16,906
Private	32,383	35,191
TOTAL PATIENTS DAYS CARE	49,647	52,097
Average Number of Patients Treated Daily—		
Service	47	46
Private	89	97
TOTAL AVERAGE TREATED DAILY	136	143
Average Number of Days Patients Remain—		
Service	5.8	6.0
Private	5.2	5.1
Beds Available and Percent of Occupancy—		
Service	73 65%	66 70%
Private	97 92%	105 92%
TOTAL BEDS AVAILABLE	170	171
Per Capita Cost Per Day—Service, Routine Care	\$27.54	\$27.12
Special Services	12.24	13.41
TOTAL COST PER DAY PER SERVICE PATIENT	\$39.78(A)	\$40.53(A)
Per Capita Cost Per Day—		
Semi-Private, Routine Care	\$30.60	\$30.13
Special Services	13.60	14.90
TOTAL COST PER DAY PER SEMI-PRIVATE PATIENT	\$44.20(A)	\$45.03(A)
Per Capita Cost Per Day—		
Private, Routine Care	\$35.19	\$34.65
Special Services	15 63	17.13
TOTAL COST PER DAY PER PRIVATE PATIENT	\$50.82(A)	\$51.78(A)
Condition of Patients on Discharge—Died	16	14
Autopsies	50%	43%
Discharged	9,197	9,683

(A) Overhead Ratio 27%



Department of Otolaryngology

For another year our Staff has performed an outstanding service in patient care, teaching and research. They have given generously of their time and energies to insure the Infirmary's objectives of a high standard of medical care.

PATIENT CARE

Last year 21,870 patients were treated in the Otolaryngology Out-Patient Clinic. Bed patients admitted totalled 4,835, of whom 4,451 had operations. Of those admitted, 1,297 were service patients and 3,358 were private patients. The Out-Patient Clinics were manned by the voluntary staff with the assistance of the residents.

The full-time staff, consisting of Dr. William W. Montgomery, Dr. George H. Williams, Dr. Werner D. Chasin, and myself, carried on their private practices in a suite adjacent to the Out-Patient Clinic. Dr. Williams recently left to enter private practice in Norfolk, Virginia.

The audiology staff of three, of which Dr. Albert W. Koch is the director, has performed over 6,500 auditory tests during the past year. Thanks to a substantial gift from the Hyams Trust, a large, new, fully-equipped auditory test room has been installed.

Dr. Werner Mueller, Director of Otolaryngological Pathology, retired on July 1, 1962 after thirty-one years of loyal service to the Massachusetts Eye and Ear Infirmary. Dr. Karoly Balogh, Jr., formerly of the Department of Pathology of the Massachusetts General Hospital, was appointed to this position. The residents rotate through Dr. Balogh's service and work closely with him in the preparation and study of histological material. During the past year 1,369 specimens were examined.

The special clinics continue to be an important service to the Infirmary. The Plastic Service, under

the direction of Dr. Edgar M. Holmes, and the Endoscopic Service, under the direction of Dr. John R. Richardson, are important training services for our residents. The Otolaryngology Tumor Clinic, under the direction of Dr. Daniel Miller, recorded 1,310 patient visits last year. This clinic functions in space allotted to it on the second floor of the White Building of the Massachusetts General Hospital; an important feature in its effectiveness is its close cooperation with the Radiotherapy Department of the Massachusetts General Hospital. Mrs. Doehler's Esophageal Speech Clinic is as important as ever, as 142 new laryngectomees received instruction last year.

MEDICAL EDUCATION

The Harvard Medical students attend the Out-Patient Clinics of the Massachusetts Eye and Ear Infirmary in groups of six to ten and receive instruction in the technique of ear, nose and throat examination and in diagnosis and treatment under the supervision of Dr. John R. Richardson. After short lecture periods and exercises in examination methods, the students work with the patients.

Residents are required to have a one-year internship and one year of general surgery before starting their three year residency in Otolaryngology. Five residents are accepted each year. All of the training is done at the Massachusetts Eye and Ear Infirmary except for a two and one-half months' rotation at the Children's Hospital. A training grant from the U. S. Public Health Service has been helpful in supporting the teaching program and in providing supplementary stipends for a few residents who indicate a desire to prolong their training and pursue a career in academic Otolaryngology.

Four temporal bone surgery courses have been given during the past year. In each course, twelve students, consisting of the staff and residents, have

been given a series of lectures and instruction in temporal bone surgery. A temporal bone dissection laboratory, equipped with two full sets of surgical instruments and two operating otoscopes, has been in almost constant use during the past year.

RESEARCH

The staff of the Microcirculatory Laboratory is studying inflammatory processes as initiated by viruses, hemodynamics of blood flow, pressures of endolymph and perilymph, and allergic reactions in the vascular system. Dr. Nelson Kiang and his associates in the Eaton-Peabody Laboratory of Auditory Physiology have just completed a magnificent series of experiments on the electrical activity of the auditory nerve. A monograph describing the responses of single nerve fibers to sound is now in preparation. The staff of the D. Harold Walker Biochemistry Laboratory continue to be interested in the three-dimensional structure of proteins in solution. Although their work has been limited thus far to model proteins with well-defined structure, it is hoped that their techniques can be applied in the future to systems of higher complexity approaching those which may be of importance in the processes of hearing and vision. A Histochemistry Laboratory, equipped by a grant from the U. S. Public Health Service, has been established and is beginning a study of enzyme patterns in the inner ear.

The Histopathology Laboratory has become a much busier place during the past year. Frontal sinus obliteration operations have been performed on animals. The experiment is providing needed information on the fate of autogenous grafts in the frontal sinus and on the preferred surgical procedures for effective obliteration.

Other studies in progress are the distribution of the efferent fibers to the inner ear, the spacial distribution of fibers in the auditory nerve, the functional effects of inflammatory endolymphatic hydrops, eustachian tube dysfunction, fluid physiology of the labyrinth, and high-tone deafness.

The resident staff is examining the records of several hundred laryngectomy patients, correlating therapy with results. Other clinical research projects include the distribution of chemotherapeutic

agents in tumors following intraarterial perfusion, and surgical methods of obliteration for chronic suppurative frontal sinusitis on human patients.

FUTURE PLANS

Several new plans have been studied to accomplish a structural and administrative reorganization of the Out-Patient Clinic. It is not easy to change the existing complicated schedule. We have acquired a closed circuit television system for the operating rooms which will be available for both microsurgery and gross surgery and will make it possible to demonstrate surgical procedures to larger groups. If and when a new research building planned for the parking lot adjacent to the Nurses' Home is constructed, two floors of that five-story structure would be available for otolaryngological research.

By exploiting the old and seeking the new, we believe the future will provide challenges and opportunities greater than ever before.

HAROLD F. SCHUKNECHT, M.D.
Chief of Otolaryngology



Slides are prepared for microscopic study at the cell level in the Histochemistry Laboratory. The Cryostat pictured here maintains frozen tissue at minus 18 degrees Centigrade so that thin, even sections can be cut.



Department of Ophthalmology

On September 1, 1962 Dr. E. B. Dunphy retired as Chief of Ophthalmology at the Infirmary and as Professor of Ophthalmology at the Harvard Medical School. He had served in these capacities for more than 20 years, the longest ophthalmic tenure on record. Under his guidance the ophthalmic department had reached a pinnacle of service and accomplishment. Despite severe limitations on space the period has been one of unparalleled expansion.

In succeeding to the office of Chief of Ophthalmology and desiring to continue my present directorship of the Howe Laboratory, I have required strong assistance. Under the new organization, Dr. Carl Johnson is Associate Chief in Charge of Clinical Services, Dr. Alfred Scott will be in charge of undergraduate teaching, while Dr. Henry Allen will continue in charge of post-graduate teaching. The clinical and research training of the residents are supervised by Drs. Paul Chandler and Carl Kupfer respectively. With a loyal and able staff under the direction of the Board of Surgeons and a cooperative administration we should be able to move with the times and continue our position of leadership.

In this, my first Annual Report for the Department of Ophthalmology, I can do little more than define the broad areas of activity.

PATIENT CARE

The eye department has a daily out-patient load of approximately 160 in its clinic and of 16 in its emergency room. An average of 13 patients (inclusive of private patients) are admitted to the hospital each day; most of these are for surgery. During the past year a total of 5,138 ophthalmic operations were performed; most were for cataract, glaucoma, detached retina, strabismus and repair of injury.

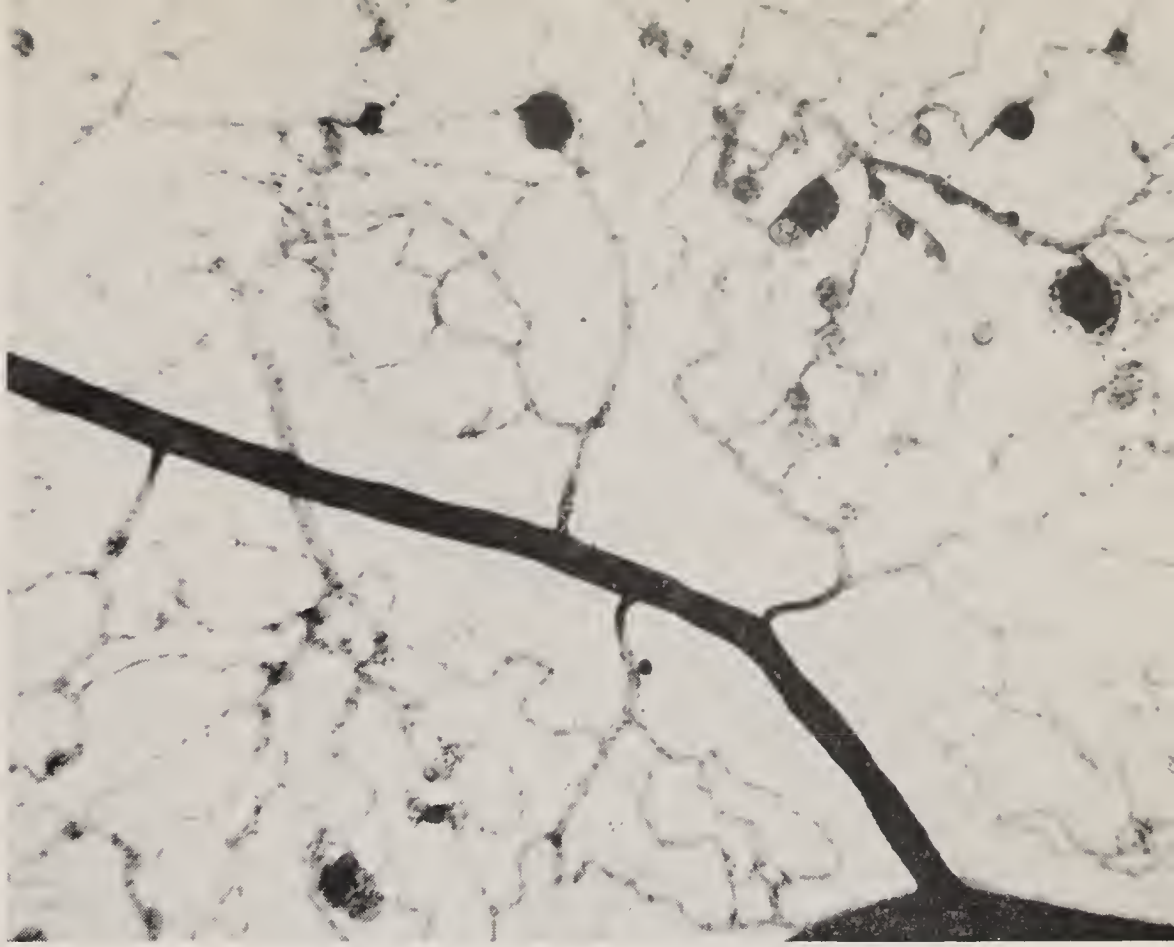
The Out-patient Clinic which accommodates the majority of ambulatory patients is divided into six

services, one for each day of the week; each service is under the supervision of a Staff Surgeon, assisted by ten residents, and approximately ten staff ophthalmologists, who generously donate their time for this function. Special clinics to which these patients may be referred are the Refraction Clinic, the Ocular Motility Clinic, the Retina Service, Glaucoma Consultation Service, and the Cornea Service — all within the administrative set-up of the Eye Department. There are, in addition, the many medical and surgical clinics of other divisions in the Out-patient Department to which some patients are referred for non-ophthalmological care.

For In-patient care, the Eye Department has approximately 90 beds at its disposal. Of these, about three-fifths are for private patients. The distinction between private and service patients is less meaningful now than formerly. The practical distinction is whether the patient is under the care of his or her own doctor or under the care of the hospital-appointed staff.

In addition to these direct services to patients, there are other services equally important but less apparent to the casual observer. In the Pathology Laboratory all specimens are prepared for microscopic examination and diagnosed; here many crucial decisions have to be made that affect the treatment and sometimes the life of the patient; last year approximately 700 specimens were processed. In the Bacteriology Laboratory causative organisms are identified and choice of antibiotics determined. The Social Service Department ministers to some of the emotional and financial problems of the patients. And in the Library the staff and scientific community have the opportunity to follow advances as they occur in ophthalmology and to keep abreast of the general medical literature. The Infirmary is a complex of activities, the scope of which is appreciated by only a few persons involved in its operation.

Retinal vessels, isolated by trypsin digestion and photographed through a microscope, illustrate the characteristic microaneurisms of diabetic retinopathy with formation of shunt vessels and occlusion of adjacent capillaries. Preparations such as this one, developed by Dr. Kuwabara's technique, were included by Howe Laboratory investigators in an exhibit on Retinal Vascular Patterns which was awarded the Hektoen Silver Medal of the American Medical Association in 1961.



The pressing demands are for increased space and for a budget commensurate with the services given. It is hoped in future Reports to note progress in these perennial requirements of a growing organization.

RESEARCH

Most of the Infirmary's eye research is carried on by the Howe Laboratory, a joint activity of the Infirmary with the Harvard Medical School, and by the Ophthalmic Plastics Laboratory and Electroretinography Laboratory. Special reports are available to those wishing more detailed accounts of the research activities. In addition to the laboratory oriented investigations, the Eye Bank, the Retrolental Fibroplasia Study, and individual clinicians make important contributions to the science and service of ophthalmology.

While it is hazardous at this short range to select the most significant investigations of the past year, the following certainly warrant special mention: development of an antibiotic for treatment of herpetic keratitis, text on toxicology of the eye, elucidation of biochemical processes involved in some types of cataract formation, understanding of the vascular disease accounting for diabetic retinopathy, and an experimental technique for visualization of the retinal microcirculation during life.

TEACHING

A less direct but no less important phase of total

ophthalmic care is the attraction of top-flight doctors and scientists into ophthalmology and the provision of superior training. While our specific plans are still in the making, we hope to invigorate the courses in undergraduate ophthalmology for medical students. Our post-graduate courses are already in a healthy state of vigor, having been the first of their kind in the country, but may be further improved as our facilities and personnel for teaching increase.

The most drastic change in the teaching program of the past few years has been the establishment of a pre-residency year of training in research for those who are considering careers in academic ophthalmology. While this is optional and was planned to serve only one in four of our residents, it is so attractive that the majority of residents have elected to take this extra training period.

It is an honor to be appointed Chief of Ophthalmology — and an awesome responsibility. I speak for the entire staff when I say that we shall do our best to care for patients of the present through our clinical services and for patients of the future through our researches and teaching. All of us — professional, administrative, and lay personnel — are joined in a common effort of the most ennobling kind. The past has shown what unique opportunities are open to the Infirmary; the future will reveal how effectively we take advantage of these opportunities.

DAVID G. COGAN, M.D.
Chief of Ophthalmology

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October 2, 1961 — September 30, 1962

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In its end-of-the-year report, the American Medical Association noted that the development of the drug 5-iodo-2' deoxyuridine (IDU), carried out in research at the Massachusetts Eye and Ear Infirmary, was one of the most significant medical break-throughs of the past year. Photographed above is a patient in the Cornea Service being treated with IDU, the first medication found effective in curing herpes simplex keratitis. It has been suggested that IDU opens the door in the fight against virus diseases in the same way that the sulfa drugs attacked bacterial diseases.

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RITA C. McCABE, R.N.	JOAN S. GORMLEY, R.N.
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Librarian	CHARLES SNYDER
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Patients' Accounts	IRWIN HERTZ
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Purchasing and Stores	LEHAN POWER
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Medical Staff

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Chief of Ophthalmology

DAVID G. COGAN, M.D.

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Department of Otolaryngology

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YASUYA NOMURA, M.D.

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YUNG SOOK SON, M.D.

ISMAIL S. SENSEL, M.D.

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ALEXANDER S. MACMILLAN, M.D.

Bacteriologist

ANITA MANGIARACINE, A.B.

Biochemist

ENDRE A. BALAZS, M.D.
(at Retina Foundation)

Boston Eye Bank

Serving New England

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Executive Secretary — CYNTHIA P. BURNS

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EDWIN B. DUNPHY, M.D.

HENRY HIXON MEYER

WESTON HOWLAND, JR.

MRS. WILLIAM A. SLADE, JR.

The members of the Staff of the Massachusetts General Hospital are Consultants to the Infirmary, and in this capacity, become a part of the Staff of the Massachusetts Eye and Ear Infirmary.

In Memoriam

HUSTON RAWLS

September 5, 1892—October 19, 1962

1948 — Member of the Corporation

DAVID HAROLD WALKER, M.D.

August 7, 1873—January 13, 1963

1902—Aural House Officer

1903—Aural Clinical Assistant

1905—Assistant Aural Surgeon

1913—Aural Surgeon

1924—Aural Chief of Service

1933—Senior Consulting Surgeon in Otolaryngology

1942-1946—Commonwealth appointee to the Board of Managers

1948—Member of the Corporation

*Annual
Report
1964*

MASSACHUSETTS EYE AND EAR INFIRMARY

THE Massachusetts Eye and Ear Infirmary is the second oldest hospital in the United States specializing in the treatment of diseases and other conditions of the eye and of the ear, nose and throat. It was established in 1824 as a free clinic for the treatment of the eye by Dr. Edward Reynolds and Dr. John Jeffries. The Infirmary was incorporated in 1827, and after years of steady expansion, the present building on Charles Street was constructed in 1899.

The Infirmary is a voluntary hospital — an independent, non-profit, private institution. Trustees, who are called the Board of Managers, are not paid, and the Medical Staff of specialists gives its services without charge to patients in the Clinics and to those patients who come into the hospital “on service”. The hospital receives no support from city or state but is financed by receipts from patients or public agencies responsible for them, by voluntary gifts and bequests, and by our allotment from the United Community Services as a participating agency. However, the Infirmary’s quota from the United Community Services is far below the amount the hospital gives in “free service” to patients from the Greater Boston area who cannot pay for their own care.

Though they are separate institutions, the Infirmary and its neighbor, the Massachusetts General Hospital, cooperate to give complete medical service to patients. The Clinics of both hospitals share a common Admitting Office with its entrance on Fruit Street.

A patient is examined in the Retina Service with a special type of instrument which was developed here. This binocular indirect ophthalmoscope, incorporating an extremely brilliant light source, permits stereoscopic visualization of the retina. It aids in diagnosing retinal detachments and other retinal disease, and is used in preparing detailed drawings or “maps” of the retina before surgery.

Photograph taken by the Photography Laboratory at the Massachusetts General Hospital.

Unless otherwise stated, all photographs are by James C. Coyne. Cover design and layout are by Norm Gardner, and printing by the Buck Printing Company.

MASSACHUSETTS
EYE AND EAR
INFIRMARY

One Hundred and Thirty-seventh

A N N U A L R E P O R T

Reports for 1963
Staff and Officers for 1964

243 CHARLES STREET • BOSTON 14, MASSACHUSETTS

CORPORATION

WALTER H. TRUMBULL	1929*
ROBERT F. BRADFORD	1934
WILLIAM A. PARKER	1935
HENRY HIXON MEYER	1937
MRS. RICHARD CARY CURTIS	1940
HORACE W. FROST	1940
HON. EDMUND V. KEVILLE	1942
FREDERIC WINTHROP	1943
MRS. SULLIVAN A. SARGENT	1945
WILLIAM H. CLAFLIN, III	1947
MRS. JOHN W. FARLEY	1948
WILLIAM F. KEESLER, JR.	1948
ARTHUR T. LYMAN	1948
THE REV. ROBERT G. METTERS	1948
AUGUST R. MEYER	1948
MISS AMELIA PEABODY	1948
HON. LEVERETT SALTONSTALL	1948
FREDERICK H. VERHOEFF, M.D.	1948
NATHANIEL FAXON, M.D.	1949
FRANCIS W. HATCH, JR.	1951
ROBERT H. HOPKINS	1951
GEORGE L. PEW	1951
HOWLAND S. WARREN	1951
GEORGE A. McLAUGHLIN	1952
HENRY K. PORTER	1952
MRS. FRANCIS T. HUNTER	1953
MRS. VARAZTAD H. KAZANJIAN	1953
MELVILLE CHAPIN	1954
RICHARD P. CHAPMAN	1955
WILLIAM EHRLICH	1955
RICHARD HARTE	1955
WESTON HOWLAND, JR.	1955
WILLIAM L. SALTONSTALL	1957
LESLIE SOULE	1957
MRS. WALTER C. DODGE	1963
THOMAS B. FROST	1963
JOHN S. HOWE	1963
FREDERICK H. LOVEJOY	1963
THOMAS ALLSOPP	1963

**dates indicate year of appointment*

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**appointed by the Commonwealth*

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OPHTHALMOLOGY

HAROLD F. SCHUKNECHT, M.D.
OTOLARYNGOLOGY



REPORT OF THE PRESIDENT

A very minor problem led me recently to re-read the corporate Charter granted by our Legislature to the Infirmary in 1827. It is Chapter 91 of the Acts of 1826 and provides in substance that the Infirmary was organized for the purpose of relieving and curing diseases of the eye and ear and of providing a course of medical treatment for persons so afflicted.

It is clear that the first concern of the Infirmary is the care of the sick — the treatment of those suffering from disease — and it follows that all other activities must be of an accessory nature and related to the purposes stated in the Charter. Every activity should be designed and carried on to assist and support treatment of disease and careful consideration should precede each new undertaking, or the expansion of an existing one, to make sure that they fall within the purposes the Infirmary was created to accomplish.

By its acceptance of the Charter, the tax-free status which followed as a legal consequence and financial assistance from public and private sources, the Infirmary has by implication at least assumed a moral as well as a legal obligation to provide service of the highest quality and to do so efficiently, compassionately and at the lowest commensurate cost. These obligations are recognized by the Board of Managers, the Executive Committee, the Chiefs of Service and the Administration. Their cooperative efforts over the years, involving constant review and readjustment of activities, have steadily improved the scope and quality of medical and surgical services, have produced a cost for patient care considerably lower than that in other Boston teaching hospitals and have maintained a balanced budget without resort to capital funds in order to defray deficits. The satisfactory operating results of the Infirmary in the past have been due in large measure to high utilization of beds and other facilities and to a steady reduction in the length of time patients must remain in the hospital. I do not see how it is possible in the future to increase substantially the occupancy rate or to

reduce much more the average stay of patients in the hospital.

All of the foregoing has been contained in my earlier reports. I apologize for the repetition, but the emphasis so afforded is valuable, particularly at this time when so much dissatisfaction is being expressed in the public press and elsewhere with respect to costs of hospitalization. Let there be no misunderstanding on one point. The Infirmary is operated to provide the best care within its capabilities for its patients. It is not operated for the benefit of its corporate members or officers, who all serve without compensation, nor for the benefit of the doctors on its staff, who donate countless hours to the care of patients — over 70,000 each year — seeking relief in the public clinics.

There is no doubt that the Infirmary has passed the point of saturation. Every facility is overcrowded and no relief which is economically feasible can be provided within the Infirmary's limited land area. This situation imposes an unfair burden on the doctors who contribute so much to the work of the Infirmary for, while most emergency and acute cases are admitted at once, elective cases sometimes wait months for admission only then to be postponed because of an unexpected emergency admission. As a result the doctors frequently find it desirable to treat their private patients in other hospitals. The Managers are thoroughly aware of the problem and are considering a number of possibilities. Obviously, any solution must be within the financial capability of the Infirmary and to the best interests of its doctors and patients. Until the problem is solved, I am sure the members of the staff will continue to do their best under trying conditions.

A few years ago an emergency service was established at the Infirmary to serve better the needs of the community. It is operated twenty-four hours a day, seven days a week. Admissions in this short time have climbed to more than ten thousand a year. It serves both rich and poor, day and night, speedily and without unnecessary formality. Recently I was visited by a gentleman who handed me a substantial capital contribution for the Infirmary. I asked what prompted the generous gift and he told me this story. His son awoke in the middle of the night with a



The Emergency Ward is open twenty-four hours a day to serve the needs of the community, and in the past year more than 10,000 persons came seeking treatment. Here a young child with an eye injury is promptly examined by the resident physician on duty while the staff nurse and the mother stand by.

fearful carache. The father was unable to raise a doctor, and having heard of the Infirmary, called it on the telephone for help. He was told to bring his son to the Infirmary, which he did by taxi, arriving at three in the morning. There he was met by a young doctor, who took the boy to the Emergency Ward and provided the necessary relief.

This simple story is in essence repeated countless times at the Infirmary in the course of every year. Such incidents justify existence. Anyone who has seen the smile on the face of a man who hears or sees for the first time in years will understand.

You must not assume from the foregoing that the Managers of the Infirmary are so preoccupied with the care of patients that they have no interest in research and teaching. Nothing could be further from the truth.

We recognize that the many topflight educational and scientific institutions situated in the Boston area create an environment particularly conducive to research and teaching in our specialties. The breadth and depth of technology is amazing and it has been said that the density of scientists per square mile is

higher in Boston than in any other similar area in our country. The Infirmary benefits greatly from this fact, both through contacts with scientists in other fields of endeavor and because specialists we wish to attract to the Infirmary are pleased to live and work where so much is going on in the scientific world.

All the advances in the treatment of disease have come about as the result of research. Later in this annual report appear statements of the projects now in process. The Infirmary intends to continue in the forefront of this work and by its teaching program to educate its residents and other students in the latest medical and surgical techniques. How else can future patients at the Infirmary and elsewhere receive treatment of the quality they deserve?

Finally, I thank the members of the staff and the administration and all the personnel for their conscientious efforts. Every time I visit the Infirmary I am impressed and delighted by the friendly atmosphere. I verily believe I see more smiles inside its doors than anywhere else.

HENRY HIXON MEYER
President



TREASURER'S REPORT

BALANCE SHEET

September 29, 1963

ASSETS

Cash in Bank and on Hand		\$ 900,122.00
Investments — Book Value:		
Securities	\$6,136,629.83	
Interest in parcel of real estate	1.00	
Interest in unsettled estate	1.00	
Sealed envelopes	2.00	6,136,633.83
Accounts Receivable:		
Patients — less reserve for doubtful accounts	\$ 224,206.50	
Miscellaneous	9,247.91	233,454.41
Inventories of Supplies, etc.		47,635.89
Unamortized Pension Costs (see note)		189,417.00
Plant:		
Land and buildings	\$3,497,079.91	
Furniture, fixtures and equipment	522,815.84	
	\$4,019,895.75	
Less: Reserve for depreciation	1,317,527.60	2,702,368.15
Construction in Progress		112,935.94
TOTAL		<u>\$10,322,567.22</u>

LIABILITIES AND FUNDS

Advances from Patients	\$ 3,283.83
Accounts Payable and Accruals	156,507.11
Special Funds	15,836.19
General Fund	1,425,241.43
General Pension Reserve	621,277.01
Permanent Funds — Income Restricted	1,409,267.22
Permanent Funds — Income Unrestricted	2,706,025.35
Special Purpose Funds	417,874.74
Unexpended Restricted Income of Permanent Funds	127,874.33
Temporary Funds	418,491.74
Funds Invested in Plant	2,702,368.15
Plant Depreciation Fund	77,326.42
Undistributed Security Gains	241,193.70
TOTAL	<u>\$10,322,567.22</u>

NOTE: Under the terms of pension plans adopted September 5, 1955, the Infirmary funded fully, by transfer from Principal of the General Fund, the entire amount of liability for past service benefits as calculated by its consulting actuaries. As of October 1, 1962, the amount by which such prepayments are chargeable to

future operations of the Infirmary was reclassified as a deferred charge, to be amortized at the annual rate of \$16,400 over the estimated average remaining service lives of participants from that date.

CONDENSED INCOME ACCOUNT

for the period ended September 29, 1963 (52 weeks)

Gross Charges for Services to Patients		\$3,195,460.43
Adjustments to Gross Charges:		
Allowances to patients	\$176,960.07	
Allowances to contracting agencies	33,348.54	
Allowances to Blue Cross	50,655.62	
Provision for uncollectible accounts	15,936.60	276,900.83
Net Revenue from Services to Patients		<u>\$2,918,559.60</u>
Other Operating Revenue		179,519.08
Total Operating Revenue		<u>\$3,098,078.68</u>
Hospital Operating Expenses		
(including provision for depreciation — \$126,145.92)		3,339,458.18
Hospital Operating Loss		<u>\$ 241,379.50</u>
Donated Income:		
United Community Services	\$ 24,114.00	
Estates of Elisha V. Ashton, G. Gorham Peters and Others	12,610.61	36,724.61
Hospital Net Loss		<u>\$ 204,654.89</u>
Unrestricted Investment Income from Permanent Funds,		
less Applicable Expenses		243,737.80
Investment Income in Excess of Hospital Net Loss —		
Transferred to General Fund		<u><u>\$ 39,082.91</u></u>
Note: During the period, hospital operating expenses aggregating \$98,098.07 were charged directly against Permanent and Temporary Funds as follows:		
Against Permanent Funds:		
Principal	\$ 18,606.48	
Income	22,617.43	41,223.91
Against Temporary Funds		56,874.16
		<u><u>\$ 98,098.07</u></u>

AUDITORS' CERTIFICATE

Massachusetts Eye and Ear Infirmary
Boston, Massachusetts

We have examined the balance sheet of MASSACHUSETTS EYE AND EAR INFIRMARY as at September 29, 1963 and the related income account for the period ended at that date (52 weeks). Our examination was made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the accompanying balance sheet and related condensed income account, with their explanatory notes, present fairly the financial position of Massachusetts Eye and Ear Infirmary at September 29, 1963 and the results of its operations for the period ended at that date, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding period.

PATTERSON, TEELE & DENNIS

Boston, Massachusetts
December 12, 1963

SUMMARY OF SECURITIES

(as of September 29, 1963)

GENERAL FUND	BOOK VALUE	MARKET VALUE	% OF TOTAL MARKET VALUE
BONDS:			
U. S. Governments	\$2,139,964.73	\$ 2,124,363.32	20.1
Canadian Governments	53,000.00	51,705.00	.5
Railroads	165,224.86	143,622.50	1.4
Utilities	647,684.54	642,029.20	6.0
Industrials	361,255.17	354,587.50	3.4
Financial	116,181.25	119,102.50	1.1
Miscellaneous	38,901.00	not valued	
TOTAL BONDS	<u>\$3,522,211.55</u>	<u>\$ 3,435,410.02</u>	<u>32.5</u>
PREFERRED STOCKS	\$ 101,515.40	\$ 120,735.00	1.1
COMMON STOCKS:			
Railroads	\$ 116,048.84	\$ 303,103.25	2.9
Utilities	414,912.05	1,305,894.67	12.4
Industrials	1,342,737.10	3,804,239.98	36.0
Financial	297,165.00	712,385.25	6.7
Insurance Companies	214,513.82	665,386.07	6.3
Miscellaneous	25,000.00	59,325.00	.5
TOTAL COMMON STOCKS	<u>\$2,410,376.81</u>	<u>\$ 6,850,334.22</u>	<u>64.8</u>
TOTAL GENERAL FUND	<u>\$6,034,103.76</u>	<u>\$10,406,479.24</u>	<u>98.4</u>
WEBER FUND (Bonds)	\$ 11,507.50	\$ 11,268.40	.1
WINTHROP FUND (Bonds & Stocks)	91,018.57	160,986.50	1.5
TOTAL SECURITIES	<u><u>\$6,136,629.83</u></u>	<u><u>\$10,578,734.14</u></u>	<u><u>100.0</u></u>

HORACE W. FROST
Treasurer

REPORT OF THE DIRECTOR



Capital expenditures during the fiscal year ended September 29, 1963, amounted to \$280,000. By far the largest and most important improvement completed was the entirely new centralized food service mentioned in last year's annual report. It went into operation in September with surprisingly little confusion during the change over. Comments from the patients and personnel have all been complimentary, and the nursing service finds that the new system of serving meals is a valuable timesaver on the patient floors. As this is the first installation of the so-called "hot pack" system in New England, considerable interest has been shown by representatives of other hospitals who have come to observe it in operation.

One of the indirect benefits resulting from the installation is the conversion of the five old floor kitchens to other uses. It was possible to provide six semi-private beds and an isolation room which we estimate will add about 1,800 patient days during the coming year and thus partially alleviate the continuing demand for more admissions. The total cost will be \$195,000. It is anticipated that this capital outlay will be amortized in five years through improved efficiency and the added income from the new beds.

Space also was released for a new nurses' dressing room, and this move in turn left an area in the basement for our own telephone switchboard. For many years telephone service at the Infirmary has been provided through the Massachusetts General Hospital switchboard. With the tremendous growth of telephone usage during the past decade, this separation should prove beneficial to the M.G.H. as well as to the Eye and Ear Infirmary. With the control of our own board and operators, better service and

better public relations should result. Yet, at the same time, all extensions at the M.G.H. can be reached from the Infirmary by direct dialing. The change over took place at the end of November, 1963. At this time we also improved internal communications by transferring control of our doctors' paging system to the Eye and Ear front desk, rather than have it continue to be operated from the White Building in the M.G.H. Overall, these changes should improve service to the patient and provide better facilities for our staff as well.

Research is being carried on at the hospital at an accelerated pace. With space at a premium every square foot is being utilized to the utmost. It is safe to say that the hospital could probably double the amount of research if only the space to accommodate new laboratories were available. As stated in last year's annual report, the National Institutes of Health approved a construction grant application of nearly a million dollars, and the Infirmary set aside a similar amount in matching funds for a new research building to be built on the parking area next to the nurses' residence at 14 Embankment Road across Charles Street Circle from the hospital. However, the obligation of this grant was postponed at our request at least to July, 1964, because it was felt that separating the research laboratories from the clinics of the hospital would be premature until a definite decision could be made on the future location of expansion planned for the hospital. As a temporary substitute, studies were made of the possibility of renting laboratory space within easy



In the Ocular Motility Clinic, a young child is checked by the doctor. This young lady has been closely followed by the service for three years and is making good progress in the correction of her strabismus or "crossed eyes."

Photograph taken by Myer Ostroff for PICTORIAL LIVING Combined With THE AMERICAN WEEKLY, rotogravure magazine of the Boston Sunday Advertiser.

reach of the hospital. As the year closed, no final decision had been made.

With the postponement of the main research building, it was decided to go ahead with a small addition to the Eaton-Peabody Laboratory in the back yard. This addition will be used to house some computer equipment close to the research, and thus to permit computer analysis of data while an experiment is still in progress.

Although costs increased about 5 per cent during the year, the operations of the hospital continued to be on a satisfactory basis. The deficit from operations of \$241,000 was more than covered by endow-

ment income. A small balance of \$39,000 was returned to the Treasurer's general fund. All statistics, such as the number of patient days, operations, clinic visits, and admissions, were higher compared with those of the year before. In spite of increased costs, we were able to avoid raising room rates. The last increase was in October, 1961. It was necessary, however, to raise operating room charges ten per cent, and X-ray charges five per cent.

The United Community Services allotment to the Infirmary was raised this year as a result of their new formula of distribution. This formula now recognizes the number of clinic visits as a factor, as well as free service and patient days. Because the Eye

and Ear has a large clinic load, this change made a substantial difference in the Infirmary's share.

Along with all Boston hospitals, the Infirmary instituted a minimum wage of \$1.30 per hour in September. This is the third increase of the minimum wage in Massachusetts in a year and a half. Another substantial cost was the increase in resident stipends put into effect in July, 1963. As a result of an exhaustive study and recommendation by the Boston Hospital Council, all teaching hospitals in the Metropolitan area cooperated in this increase to give these young doctors a more realistic minimum living stipend.

The Infirmary is proud of the fact that we are training thirty-one residents who come for three or four years of training in otolaryngology or ophthalmology. Nearly all of these doctors are married and have growing families. In the coming year the amount of these stipends will be about \$180,000. However, we are fortunate in having training grants from the National Institutes of Health which at present contribute a substantial amount towards these stipends.

Another large expense facing the hospital in the not too distant future is the probability that we will have to microfilm our medical records. The cost of this procedure, made necessary by the growing lack of storage space, will be an item running into thousands of dollars. Because of the importance of this decision, it was decided that a survey should be made of our whole medical record system in the light of our plans for future expansion.

Recently, the Infirmary has been fortunate in receiving gifts for expensive equipment necessary to keep the hospital a leader in its specialized fields of patient care, teaching and research. An electron microscope was given to the Howe Laboratory of Ophthalmology to be used in conjunction with the larger one they have been using for several years. A

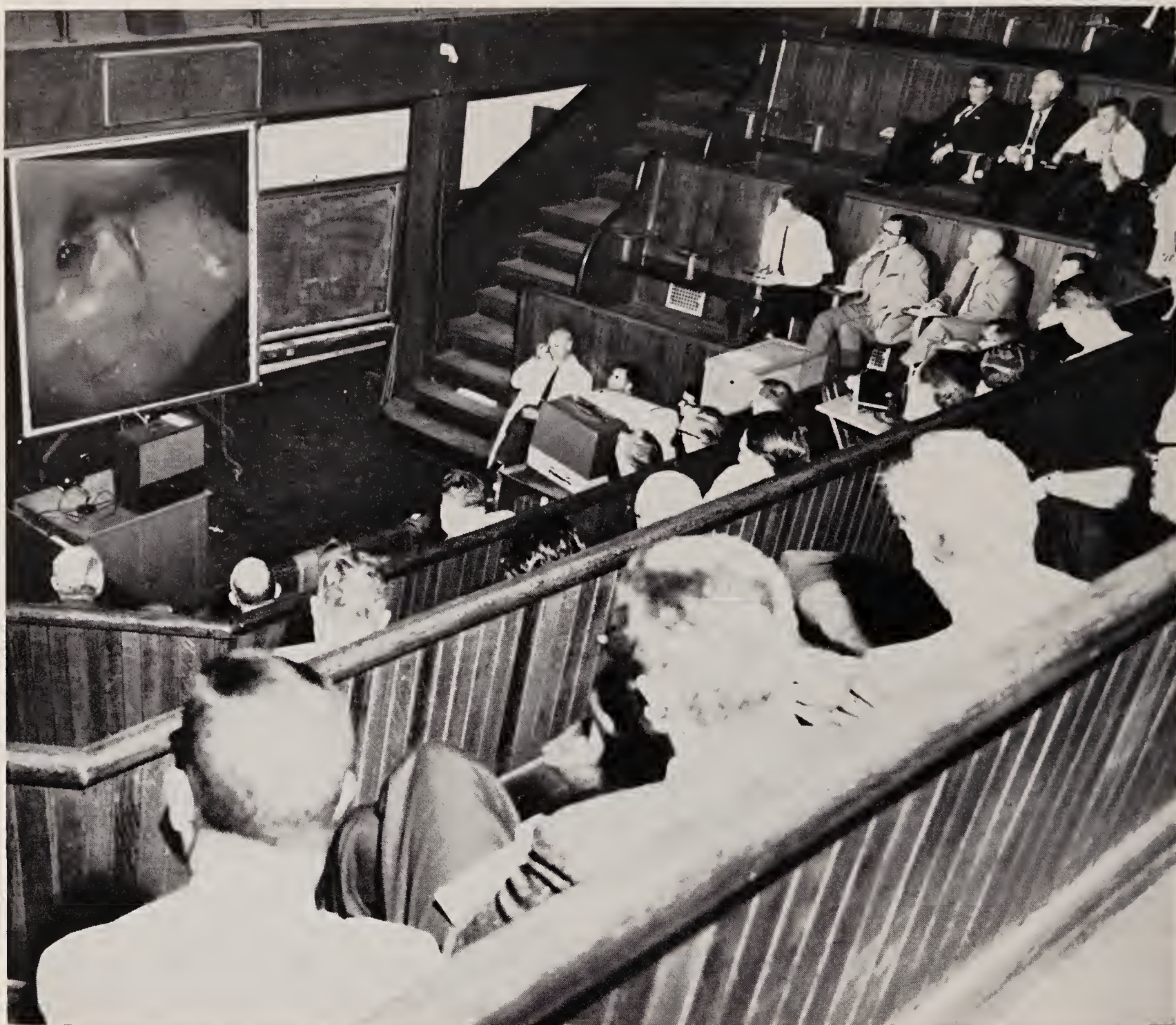
closed-circuit television unit was purchased by the Ear, Nose and Throat Service out of special funds. This equipment, which operates through a microscope, is considered one of the best methods of teaching microsurgery of the ear. It allows large numbers to view operations which could not be seen from the operating room galleries. A similar setup has been given to the Eye Service. Also substantial equipment was purchased for the Howe Laboratory Consultation Service and the audio psycho-acoustics laboratory to be used in clinical patient care.

It is a constant challenge to keep abreast of the rapid advances in medical equipment recommended by our staff. This is particularly true of our X-ray Department where perhaps the greatest technological changes are taking place. The Fuller Foundation has recently made it possible for us to purchase an automatic film processing machine. There is still need, however, for a new X-ray machine. During the year 37,000 X-ray films were taken, an increase of 10 per cent over the year before and a new record.

One of the administrative changes of interest during the year was a reorganization of the front desk personnel. A new position was created to supervise this important part of the hospital. Included with responsibility of the front desk will be the telephone switchboard. It is felt that this step forward will greatly improve public relations with our patients and service to our staff.

Another change of interest was the formation of an archives committee and the appointment of the librarian as the archivist. As this is the one hundred and thirty-seventh year of the Eye and Ear Infirmary, there are many pictures, manuscripts, and records of historical interest which should be reviewed and filed.

In closing, I would like to congratulate the Ladies Visiting Committee and all the volunteers on their very substantial contribution to the hospital during this year. The Ladies Visiting Committee gave to



Demonstration of a stapedectomy procedure via closed circuit television, now being used as an effective teaching device by both the Departments of Ophthalmology and Otolaryngology.

the hospital the entire dinner service for the new central dietary system, furniture for the television room at the nurses' residence, and many other practical gifts for patient care. They also made a substantial financial contribution toward the work of the newly formed Archives Committee. Money was raised for these contributions by the operation of the Gift Shop, and a most successful spring dinner-dance and fashion show at the Sheraton-Plaza Hotel.

We have now occupied our main building on Charles Street for sixty-five years. A model specialty

hospital at the turn of the century, it has now been outgrown. It can still give years of good service within the limitations of its size, but the hospital of today, with all its activities in patient care, teaching and research, now needs a substantially larger building. I feel that we are on the threshold of a new and challenging period in the growth of the Infirmary.

FRANCIS S. HILL
Director

1964 SERVICE AWARDS

MEDICAL STAFF

Twenty-five Years

JULIAN F. CHISHOLM, JR., M.D.

Assistant Surgeon in Ophthalmology

J. CHARLES DROOKER, M.D.

Surgeon in Otolaryngology

NON-MEDICAL STAFF

Twenty Year Pins

DOROTHY M. CAMPANELLA

Dietary

MOLLIE SILVERMAN

Accounting

Ten Year Pins

MARION L. ANDERSON, R.N.

Anesthesia

HERA L. FAUCON

Nursing

DOROTHY A. MCKENNEY

Dietary

ANTHONY BUKOWSKY

Housckeping

GEORGE HARRISON

Housckeping

CHARLOTTA A. MICHALEK

Nursing

JOHN J. DOHERTY

Optical Shop

HELEN M. LIND

Nursing

JEANNETTE REDDEN, R.N.

Nursing

COMPARATIVE STATISTICS

HOSPITAL

	1962	1963
Service Patients—Eye Cases	1,434	1,630
Ear, Nose and Throat Cases	1,297	1,471
<i>Total Service Patients Admitted</i>	2,731	3,101
Private Patients—Eye Cases	3,409	3,485
Ear, Nose and Throat Cases	3,538	3,322
<i>Total Private Patients</i>	6,947	6,807
TOTAL PATIENTS ADMITTED	9,678	9,908
Operations, Service—Eye Cases	1,467	1,585
Ear, Nose and Throat Cases	1,101	1,233
Operations, Private—Eye Cases	3,671	3,826
Ear, Nose and Throat Cases	3,350	3,223
TOTAL OPERATIONS	9,589	9,867

CLINICS

New Patients—Eye Clinic	4,615	4,538
Ear, Nose and Throat Clinic	2,764	2,602
TOTAL NEW PATIENTS	7,379	7,140
Revisits—Eye Clinic	42,993	44,890
Ear, Nose and Throat Clinic	19,106	18,197
TOTAL CLINICAL REVISITS	62,099	63,089
Visits—Eye Clinic	47,608	49,428
Ear, Nose and Throat Clinic	21,870	20,799
TOTAL CLINICAL VISITS	69,478	70,227
Emergency Patients Admitted to Hospital	359	412
Patients Admitted to Emergency Ward	8,842	10,496

COMPARATIVE STATISTICS

	1962	1963
Patient Days Care — Service	16,906	18,317
Private	35,191	34,582
TOTAL PATIENT DAYS CARE	52,097	52,899
Average Number of Patients Treated Daily—		
Service	46	50
Private	97	95
TOTAL AVERAGE TREATED DAILY	143	145
Average Number of Days Patients Remain—		
Service	6.0	5.9
Private	5.1	5.1
Beds Available and Per Cent of Occupancy—		
Service	66 70%	67 73%
Private	105 92%	105 92%
TOTAL BEDS AVAILABLE	171	172
Per Capita Cost Per Day—Service, Routine Care	\$27.12	\$28.62
Special Services	13.41	14.04
TOTAL COST PER DAY PER SERVICE PATIENT	\$40.53(A)	\$42.66(A)
Per Capita Cost Per Day—		
Semi-Private, Routine Care	\$30.13	\$31.80
Special Services	14.90	15.60
TOTAL COST PER DAY PER SEMI-PRIVATE PATIENT	\$45.03(A)	\$47.40(A)
Per Capita Cost Per Day—		
Private, Routine Care	\$34.65	\$36.57
Special Services	17.13	17.94
TOTAL COST PER DAY PER PRIVATE PATIENT	\$51.78(A)	\$54.51(A)
Condition of Patients on Discharge—Died	14	13
Autopsies	43%	62%
Discharged	9,683	9,896

(A) Overhead Ratio 27%



DEPARTMENT OF OPHTHALMOLOGY

A walk through the busy Eye Clinic can be an impressive experience to anyone with curiosity and human concern. In this, the largest single Clinic of the Massachusetts Eye and Ear Infirmary-Massachusetts General Hospital complex, 100 to 200 patients are daily provided with eye care of a high quality. Each patient has his or her own pressing eye problem and the Clinic must necessarily be organized to handle all contingencies. That it works with a reasonable degree of harmony is testimony to a staff of conscientious employees and volunteer physicians. An observer passing through the Clinic has but a glimpse of its inner workings.

SPECIALTY CLINICS

The special clinics within the Eye Department have served an increasingly important function this year despite severe limitations in space.

The *Glaucoma Consultation Service* provides assistance in diagnosing and distinguishing various forms of glaucoma and selecting appropriate treatment for each case. The space for this clinic was reorganized during the past year, needed equipment was added, and air conditioning was installed. This Clinic, under the supervision of Dr. W. Morton Grant, handled 4,288 patient visits. In addition to the assigned residents, this Clinic and its patients have benefited by the presence this year of three Fellows. The following investigations in relation to glaucoma were undertaken by them: (1) clinical evaluation of treatment with digitalis; (2) safety of the use of cardiac vasodilators; (3) effect of sedatives and stimulants; (4) effects of corticosteroid drops on intraocular pressure, corneal thickness and ocular musculature; and (5) clinical and laboratory investigation of blood vessels of the anterior segment of normal and glaucomatous eyes.

The large *Refraction Department*, under the direction of Dr. Robert Herm, continues its heavy load of approximately 740 refractions per month. Sixty per cent of these refractions are done by the house officers. A corneal contact lens facility has now been integrated into the teaching program, and in the past year a service in subnormal-vision aids has been established to serve both hospital and private patients. Dr. William Stone, Jr., also conducts a special contact lens service for patients requiring scleral lenses.

The *Cornea Clinic*, supervised by Dr. Claes H. Dohlman, serves approximately 50 patients each week. Patients are referred for consultation from the main clinic and for such special studies as long term use of antiviral agents for herpetic keratitis, treatment of corneal edema, and corneal grafting.

The *Retina Service* operates one of the most active specialty clinics in the Eye Department. Under the supervision of Dr. Charles L. Schepens since its founding in 1948, the Service has a permanent staff of five ophthalmologists and a variable number of Residents and Clinical Fellows. In 1963 a total of 1898 patients were examined and 249 operations performed for retinal detachment. In addition to the semi-monthly conferences, a successful innovation of the past year was a 3-day course conducted by the Service. This was attended by 154 ophthalmologists from all over the country.

The *Ocular Motility Clinic*, under the direction of orthoptist, Miss Ann Stromberg, provides a diagnostic work-up of all new patients referred from the main clinic, follow-up visits of patients under treatment, pre-operative and post-operative examinations of patients admitted for muscle surgery, demonstrations of orthoptic techniques to medical students, and training of orthoptic technicians. Current investigations include a limited study of pleoptics and a survey of amblyopia. During the past year 5,200 patients were evaluated in this Clinic.

GENERAL ORGANIZATION AND MISCELLANEOUS FUNCTIONS

The organization of all clinical services in ophthalmology is under the supervision of Dr. Carl C. Johnson and the Board of Ophthalmic Surgeons. Each of the Surgeons is responsible one day each week for the functioning of the Outpatient Clinic and for the surgery undertaken the following day. Hence there are six separate Eye Clinics identified according to the days of the week. The Surgeon in charge each day has with him in the Clinic an average of nine visiting staff members, each an M.D. and certified specialist in ophthalmology, and an approximately equal number of residents. It is not generally realized, by the public, that the Visiting Staff serves voluntarily. The time they take from their practices and the responsibilities they assume without pay stand in commendable contrast to prevalent economic practices.

During the past year those of the ophthalmic staff who have progressed to emeritus consultant status have been Drs. William Beetham and Virgil Casten, while those who have found it necessary to resign have been Drs. S. Forrest Martin and Joseph Dowling. Dr. Earl Seale advanced to the rank of Surgeon, and Drs. Perry Rosenthal, John Carroll and Claes Dohlman have been newly appointed to the staff.

The present active staff consists of 62 ophthal-

mologists. Planning is in progress to organize our appointment system so that each service day will usually have one Surgeon, two Associate Surgeons, four Assistant Surgeons, and five Assistants in Ophthalmology. While this will be a blueprint for appointments, it will be varied according to the patient load.

A new operating room has been put into service this past year to handle the increased number of surgical procedures. A few additional hospital rooms have also been added by rearrangement of the dietary department. Yet the acute need for more bed space continues and many of our staff are being forced to seek less than satisfactory space for their patients elsewhere in non-ophthalmic hospitals.

After two years of discussions with representatives of the Boston Eye Bank, Pathology Department of the Massachusetts General Hospital and administrative personnel of several hospitals, we have effected a system that we hope will yield a more adequate number of eyes for corneal transplants and research. The public has expressed an interest in liberalizing the means for donation of eyes for the benefit of others. We, for our part, have modified the procedure so that the granting of special permission for the use of eyes after death will be less emotionally traumatic. Preliminary trials with the new system have been encouraging.

Under the guidance of Miss Madeline Shipsey, the

The 31 students registered in Harvard's five months postgraduate course in ophthalmology, given each year at the Infirmary, here receive a lecture in neuro-ophthalmology from a member of the hospital staff.



Social Service Department has given aid in numerous paramedical problems. Of the 1,671 eye patients served by Social Service this past year, 807 were glaucoma patients, most of whom were referred because of lack of adequate understanding of the need for treatment, 287 were retina patients, 85 were patients needing referral to the Massachusetts Division of the Blind, and 69 were patients or patients' relatives who required help with living accommodations during their period of eye care. Projects carried during the past year were: (1) a conjoint study with the Boston College School of Education in preparing peripatology students for teaching the blind; (2) social service training for students from several colleges; and (3) organization of group meetings for glaucoma patients.

In anticipation of the eclipse last July the Infirmary played a leading role in devising protective filters for the eye and in advising the profession and the public by various news media of safe and practical methods of viewing. We know of no retinal burns that resulted when the precautions were followed.

RESEARCH

Research at the Infirmary consists of studies by the clinical staff and by those in the Infirmary's laboratories. The resultant publications, listed elsewhere in this Report, cover a wide variety of problems. Since each of the two ophthalmic research laboratories, the Howe Laboratory and the Ophthalmic Plastics Laboratory, have their own Annual Reports no further description of their activities will be given in these columns this year, other than to say that both have been expanding vigorously. Also attached to the Infirmary is the Retrolental Fibroplasia Program conducted by Dr. Leona Zacharias. It may come as a surprise to many that despite the discovery of oxygen as the cause of retrolental fibroplasia this Program has uncovered approximately 30 new cases of the disease since 1958.

TEACHING

Under the guidance of Dr. Alfred Scott, the undergraduate teaching program at Harvard Medical School is being reviewed. Many of us feel that the undergraduate medical students' contact with ophthal-

mology is inadequate and we have submitted specific recommendations for an improved program in the School's new curriculum. The postgraduate teaching in ophthalmology has continued its five months' course under the guidance of Dr. Henry Allen with a full complement of 31 students, which is all that can be accommodated in the present (inadequate) quarters. But it is with the training of residents that the Infirmary is naturally most concerned. Under our preceptor system the entire staff is concerned with this training, but those most deeply involved are Dr. Johnson, the general director of the program, Dr. Paul Chandler who continues as Associate Director of Resident Training, and Dr. Carl Kupfer who is in charge of the preclinical year for those electing the four year house officer program.

The number of house officers on the Eye Service has been increased this past year to 14 and the stipends have been raised so that during his first year each resident receives \$3600, the second year \$4200, and the third year \$4800. During his final year the resident is appointed a Harvard Teaching Fellow and is expected to assist in the undergraduate teaching. Approximately half of the residents elect to take a year in the Howe Laboratory prior to their clinical residency, and insofar as they indicate a firm interest in academic ophthalmology the stipends for their entire training period are provided by the National Institutes of Health.

CONCLUSION

The Infirmary's multiple activities constitute an impressive operation. The practical care of today's patients, the cultivation of fundamental and applied research, and the training of future physicians and ancillary personnel provide great opportunities and responsibilities. The success of the Infirmary depends on the hard work and dedicated talents of many persons. These we are fortunate in having. What we do not have, and need most critically, is adequate space — space for the outpatient department, for the in-hospital, and for the research laboratories. We must expand considerably in the near future.

DAVID G. COGAN, M.D.
Chief of Ophthalmology

DEPARTMENT OF OTOLARYNGOLOGY



I am pleased to report that the Staff of the Department of Otolaryngology has had a very busy year. Our task is to provide medical and surgical care for a large number of service and private patients with ear, nose and throat complaints, utilizing improved concepts of medical management with the latest techniques and equipment; to teach both the graduates and undergraduates; to perform basic and clinical research in an effort to evolve better treatment or hopefully to eliminate some ear, nose and throat disorders; and to plan programs and facilities for the future which will meet the needs of our expanding population. Let me tell you what we have done this past year.

PATIENT CARE

Last year there were 20,799 visits to the Out-Patient Clinic, 1,471 admissions of service cases to the Infirmary, and 1,233 surgical procedures on service patients. In addition, 3,322 private patients were admitted to the Infirmary, of which 3,223 received surgical procedures.

The full-time staff, consisting of Dr. William W. Montgomery, Dr. Werner D. Chasin, Dr. Michael M. Paparella, Dr. Alfred D. Weiss, and me, carried on our private practices on a time-sequential basis in the ENT Private Office suite located near the ENT Out-Patient Clinic.

A Visiting Staff of thirty-five otolaryngologists with private practices in Boston and its environs did a large part of the teaching as well as supervision of residents in the out-patient and in-patient services.

SPECIAL SERVICES

An *Otoncurology Service* was established in February, 1963 with the appointment to the full-time staff of Dr. Alfred D. Weiss, a neurologist of the Massachusetts General Hospital. The service is now equipped to perform quantitative caloric tests and electronystagmography, and additional diagnostic procedures will be added.

The *Endoscopy Service*, under the direction of Dr. John R. Richardson, has cared for service patients with foreign bodies of the respiratory tract and esophagus, and diagnostic problems, with no fatalities or serious complications. Dr. Montgomery has given his usual course on endoscopy to the residents.

The *Esophageal Speech Service*, under Mrs. Doehler's direction, admitted 159 new laryngectomies from the New England area for esophageal speech instruction. Mrs. Doehler lectured at ten

In the new Otoncurology Service, a patient's eye movements, both those which are spontaneous and those which are induced by temperature changes in the ear canal, are recorded by electronystagmography. This is one of a series of diagnostic tests used in the localization of lesions within the vestibular apparatus and its central nervous system connections; it is extremely helpful in the diagnosis of vertigo, tumors, Meniere's disease, and other disorders.



educational institutions in the greater Boston area last year. A Saturday morning class provided continuing instruction for the more sophisticated laryngectomees.

The Tumor Clinic, staffed jointly by the Massachusetts Eye and Ear Infirmary and the Massachusetts General Hospital, met every Thursday and focused the professional talent of several disciplines on the management of patients with malignancies of the head and neck. The ear, nose and throat Tumor Clinic staff has been headed by Dr. Daniel Miller, who has been assisted by Dr. Floyd B. Goffin, our first Cancer Fellow supported by the National Institutes of Health.

The Audiology Service, headed by Mrs. Judith Chasin, M.A., with a staff of three and equipped with four sound-treated rooms, was able to perform pure-tone and speech audiometry, recruitment tests, Bekesy and electro-dermal audiometry, malingering tests, and free-field testing of children. An average of one hundred patients was examined weekly, of whom two-thirds were service patients.

The Ear, Nose and Throat Social Service, under

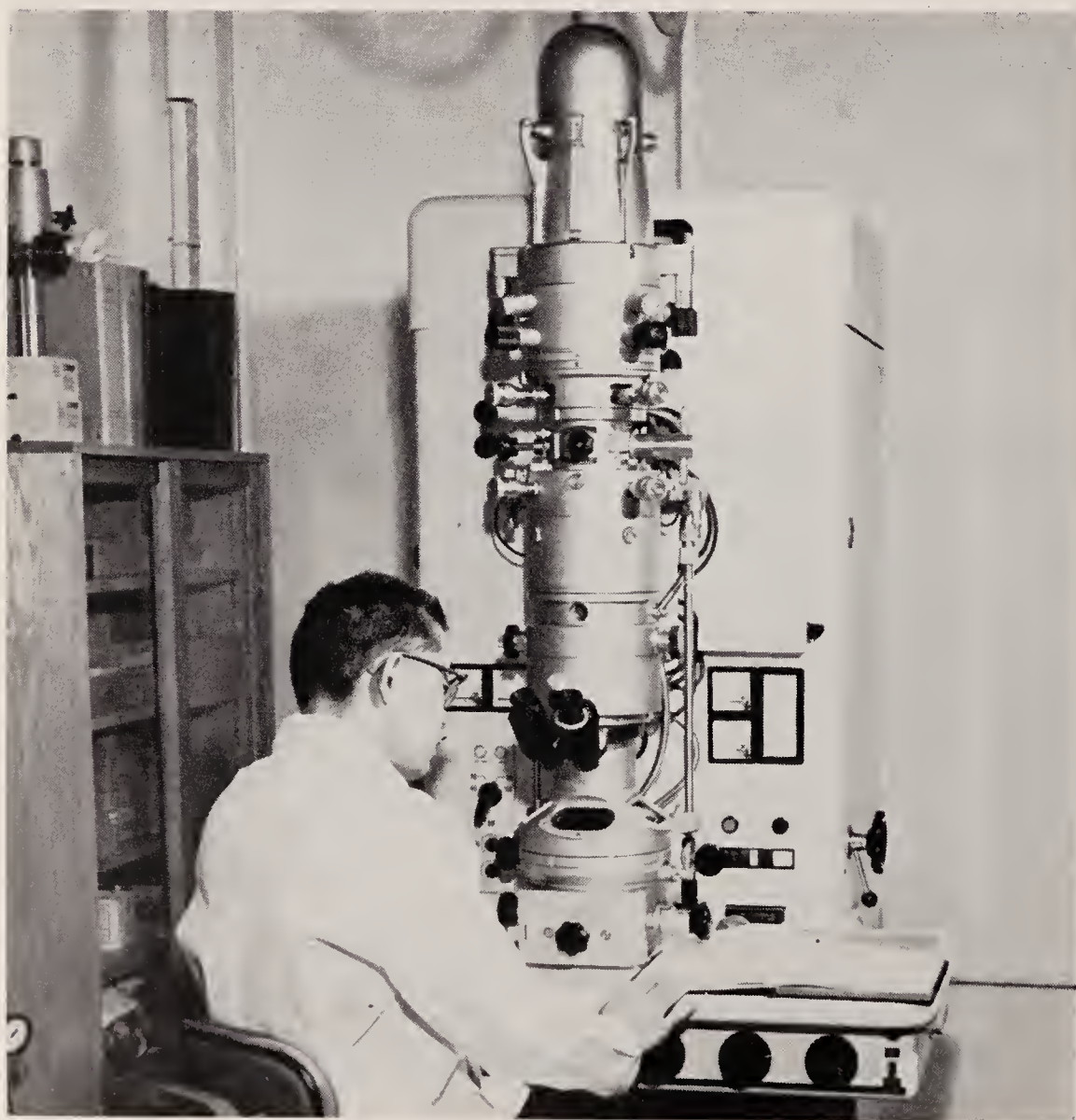
Miss Madeline Shipsey's direction, served 650 patients, of whom 212 had disorders of the nose and throat, and 438 of the ear. The social service staff, residents, and other interested persons met once weekly at a Patient Care Conference to discuss the management of problem patients.

The Pathology Service, under the direction of Dr. Karoly Balogh, examined 1,454 tissue specimens this year. Conferences were held with residents and interested staff members to study the specimens which had been processed each week.

On the *Plastic Service*, Dr. Edgar M. Holmes and his staff instructed the residents in the surgical procedures of rhinoplasty, otoplasty, and other similar operations.

RESEARCH

The staff of the Eaton-Peabody Laboratory of Auditory Physiology, under the direction of Dr. Nelson Kiang, have been studying the motion of the stapes, the responses of single nerve cells in the cochlear nucleus, the effects of cochlear destruction on spontaneous activity of cochlear nucleus units,



The Ear, Nose and Throat Electron Microscopy Laboratory, which became fully operational last summer, produced the first electron-photomicrographs of the human organ of Corti in September.

In the D. Harold Walker Laboratory of Biochemistry, an automatic amino acid and peptide analyzer provides essential data necessary for the detailed study of the structure of proteins in relation to their function. This apparatus makes it now possible to perform analyses with greater accuracy and in a much shorter time than by using a manual method.



and the connections of cells of the cochlear nucleus to other structures in the medulla.

Dr. John Irwin and his staff in the Microcirculatory Laboratory continue to study the hemodynamics of the pulmonary circulation, the effects of anaphylaxis on microcirculation, the circulation of the inner ear, and the anti-inflammatory effects of certain new drugs.

Dr. S. Peter Marfey and his associates in the D. Harold Walker Biochemistry Laboratory continue to work on the three-dimensional structure of proteins using reagents which afforded intramolecularly cross-linked derivatives which were suitable for stereochemical investigation.

The new Electron Microscopy Laboratory, under the supervision of Mr. Robert S. Kimura, became fully operational in July, 1963. Because of the bat's fantastic sense of echo-location, a study is being made to determine if there are any special morphological features in its ears. In September, 1963 the first electron-photomicrographs were made of the human organ of Corti. This was made possible by the prompt acquisition of refrigerated specimens from the Department of Pathology of the Massachusetts General Hospital.

The Histopathology Research Laboratory is currently staffed by five full-time tissue technicians, a laboratory technician, two animal caretakers, and seven part-time doctoral investigators. The studies include human temporal bone pathology, experimental stapes surgery, eustachian tube physiology, frontal sinus obliteration surgery, physiology of the

endolymphatic sac, the pathology of positional vertigo, and others.

In the Histochemistry Laboratory, Dr. Balogh and his staff are working on the metabolism of the hearing organ.

FUTURE PLANS

The greatest need at the present time is additional bed space for the private patients of the Visiting Staff. All possible areas of expansion and redevelopment are being investigated seriously.

During the coming year, the Department of Otolaryngology is planning two postgraduate courses, one in ear surgery and the other in the treatment of disorders of the paranasal sinuses. A closed circuit television system has been purchased and is successfully operational for these courses.

The Otolaryngology Service is planning to expand its testing facility to include taste testing and electrodiagnostic tests of facial nerve function.

A tympanoplasty service will be instituted to provide better application of technical skills to this very complex surgical procedure.

The work schedules of the teaching staff and the scheduling of outpatients will be adapted to conform with the newly planned Harvard Medical School curriculum, effective next year, so that the students will be given the best possible exposure to techniques in the diagnosis and treatment of ear, nose, and throat disease.

HAROLD F. SCHUKNECHT, M.D.
Chief of Otolaryngology

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October 1, 1962—September 30, 1963

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December 30, 1914 — March 8, 1963

1956 — Graduate Assistant in Otolaryngology

1960 — Assistant in Otolaryngology



FORM OF BEQUEST

I give to the Massachusetts Eye and Ear Infirmary, a charitable corporation organized under the laws of Massachusetts, and situated at Boston, Massachusetts.....Dollars.

The background of the entire cover is a high-contrast, black and white micrograph. It shows a dense network of elongated, wavy, and somewhat parallel structures, possibly representing biological tissue like muscle fibers or neural pathways. The overall texture is highly detailed and organic.

ANNUAL

1964 MASSACHUSETTS
EYE AND EAR INFIRMARY

REPORT

THE Massachusetts Eye and Ear Infirmary is the second oldest hospital in the United States specializing in the treatment of diseases and other conditions of the eye and of the ear, nose and throat. It was established in 1824 as a free clinic for the treatment of the eye by Dr. Edward Reynolds and Dr. John Jeffries. The Infirmary was incorporated in 1827, and after years of steady expansion, the present building on Charles Street was constructed in 1899.

The Infirmary is a voluntary hospital — an independent, non-profit, private institution. Trustees, who are called the Board of Managers, are not paid, and the Medical Staff of specialists gives its services without charge to patients in the Clinics and to those patients who come into the hospital “on service”. The hospital receives no support from city or state but is financed by receipts from patients or public agencies responsible for them, by voluntary gifts and bequests, and by our allotment from the United Community Services as a participating agency. However, the Infirmary’s quota from the United Community Services is far below the amount the hospital gives in “free service” to patients from the Greater Boston area who cannot pay for their own care.

Though they are separate institutions, the Infirmary and its neighbor, the Massachusetts General Hospital, cooperate to give complete medical service to patients. The Clinics of both hospitals share a common Admitting Office with its entrance on Fruit Street.

The Cover

The cover shows small portions of cells from the human retina magnified 150,000 times by the electron microscope. The photograph is of the outer segments of photoreceptor cells where the initial visual impulses occur. Upon contact with light, the pigment contained in this part of the retina is chemically altered as is the film in a camera; the changes result in the generation of an electrical impulse which is sent through

the optic nerve to the brain.

This high-powered electron microscopy was performed by Dr. Toichiro Kuwabara in the Howe Laboratory of Ophthalmology, a joint project of the Infirmary and Harvard Medical School. As Dr. Cogan states in his Annual Report for the Laboratory, “the use of the electron microscope in the study of disease is still in the exciting stage of newness.”

Photography by Carl Brunn for Daly Associates. Artwork by Norm Gardner. Printing by Buck Printing Company.

MASSACHUSETTS
EYE AND EAR
INFIRMARY

One Hundred and Thirty-eighth

A N N U A L R E P O R T

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Staff and Officers for 1965

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WALTER H. TRUMBULL	1929*
ROBERT F. BRADFORD	1934
WILLIAM A. PARKER	1935
HENRY HIXON MEYER	1937
MRS. RICHARD CARY CURTIS	1940
HORACE W. FROST	1940
HON. EDMUND V. KEVILLE	1942
FREDERIC WINTHROP	1943
MRS. SULLIVAN A. SARGENT	1945
WILLIAM H. CLAFLIN, III	1947
MRS. JOHN W. FARLEY	1948
WILLIAM F. KEESLER, JR.	1948
ARTHUR T. LYMAN	1948
THE REV. ROBERT G. METTERS	1948
AUGUST R. MEYER	1948
MISS AMELIA PEABODY	1948
HON. LEVERETT SALTONSTALL	1948
FREDERICK H. VERHOEFF, M.D.	1948
NATHANIEL FAXON, M.D.	1949
FRANCIS W. HATCH, JR.	1951
ROBERT H. HOPKINS	1951
GEORGE L. PEW	1951
HOWLAND S. WARREN	1951
GEORGE A. McLAUGHLIN	1952
HENRY K. PORTER	1952
MRS. FRANCIS T. HUNTER	1953
MRS. VARAZTAD H. KAZANJIAN	1953
MELVILLE CHAPIN	1954
RICHARD P. CHAPMAN	1955
WILLIAM EHRLICH	1955
RICHARD HARTE	1955
WESTON HOWLAND, JR.	1955
WILLIAM L. SALTONSTALL	1957
LESLIE SOULE	1957
MRS. WALTER C. DODGE	1963
THOMAS B. FROST	1963
JOHN S. HOWE	1963
FREDERICK H. LOVEJOY	1963
THOMAS ALLSOPP	1963
MRS. JOHN DANE, JR.	1964

*dates indicate year of appointment

BOARD OF MANAGERS

HENRY HIXON MEYER,
PRESIDENT

HORACE W. FROST,
TREASURER

HON. EDMUND V. KEVILLE,
SECRETARY

ROBERT BACON*
MELVILLE CHAPIN
WILLIAM H. CLAFLIN, III
MRS. RICHARD CARY CURTIS
MRS. JOHN W. FARLEY
ROBERT H. HOPKINS
WILLIAM A. PARKER
MRS. SULLIVAN A. SARGENT
WALTER H. TRUMBULL
ROBERT WALDMAN*
FREDERIC WINTHIROP

**appointed by the Commonwealth*

DIRECTOR

FRANCIS S. HILL

CHIEFS OF SERVICE

DAVID G. COGAN, M.D.
Ophthalmology

HAROLD F. SCHUKNECHT, M.D.
Otolaryngology



REPORT OF THE PRESIDENT

The year 1965 may well prove to be both crucial and decisive in the life of the Infirmity. For almost seventy years it has conducted its operations at the corner of Charles and Fruit Streets in quarters which are now bursting at the seams and must be expanded to meet the growing demand for patient care in both the clinics and the hospital.

This problem has been of great concern to the Board of Managers and the Administration for many years. There are a number of possible solutions:

1. Construct an addition in the back yard. On a short-term basis this would undoubtedly be of great help but it would be very expensive, would cut off light and air from the existing hospital building, would interfere with operations and create confusion during the period of construction and in the end would not permanently solve the space problem.

2. Move the hospital — lock, stock and barrel — to another location where sufficient land is available to meet all foreseeable future requirements. This is not practical for many reasons, including the great expense involved in acquiring land and constructing an entirely new facility, the abandonment of the present structures which represent a large investment and could not be liquidated for more than a fraction of their cost and the termination of the Infirmity's relations with the Massachusetts General Hospital.

3. Create a branch of the Infirmity at another location. This is a possibility and has received a great deal of consideration by the Board of Managers, the staff and the administration, particularly in connection with the proposed Affiliated Hospitals Center in the Longwood area which wishes the Infirmity to provide at the Center essential service in ophthalmology and otolaryngology. The provision of such service there by members of the Infirmity's staff and rotating residents is feasible and would be of benefit

to both institutions. The Infirmity expects to undertake this project whatever it may do to solve its basic lack of space. However, the operation in essence of another Infirmity in the Longwood area raises so many difficult problems of administration and staffing that this solution is undesirable.

4. The acquisition of additional land adjoining the present site of the Infirmity into which the Infirmity can expand. For many years it has been obvious that the Charles Street Jail should be replaced by a modern and different sort of facility designed primarily to hold persons pending trial. Last spring the Legislature passed an act (Chapter 560 of the Acts of 1964) which authorizes the Mayor of the City to sell the Charles Street Jail property to the Boston Redevelopment Authority for use in connection with an Urban Redevelopment project. The Infirmity and the Massachusetts General Hospital are now working with others in the preparation of a plan for the redevelopment of the area extending from Charles Street to Blossom Street between Cambridge Street and the hospital buildings. This plan will be of great benefit to the city as well as to the hospitals. It will increase substantially the tax revenue from the area. It will improve the appearance of Cambridge Street which, upon completion of the Government Center, will become a main entrance to the core city. It will make possible an extension of the Infirmity and future extensions of facilities for both hospitals. And, finally, it will provide housing, garage space, a motel and a doctors' office building which will be of advantage, directly or indirectly, to the hospitals. This is just another example of cooperation for the common good by two separate charitable institutions.

About this time every year the subject of hospital costs is aired in the press and committee hearings. I fear there will never be an end to it unless the hospitals, themselves, organize a major educational



Surgeons carried out 9,904 procedures in the hospital's ten operating rooms during the past year.

campaign, explain in detail the items which make up the daily charge, the vast amount of time expended by volunteers for which no charge is made and the gifts and income from funds donated by others which are used to reduce charges. People go to hospitals to get well. They receive the finest care and the great majority of them leave the hospital cured and content — even with the bill. They have seen for themselves. The criticisms come, I believe, mostly from people who have had no serious illness. In what other “business” do so many people donate so much time and money? Hospital costs may have doubled in the last ten years but so have lots of other

things, including hotel charges. At hotels the guests receive now no more than they did ten years ago, but at hospitals the average stay has been reduced substantially and the chance of recovery has been increased dramatically.

The Infirmary was a busy place in 1964. High occupancy and crowded clinics strained its resources. Nevertheless it was a happy ship and I thank its crew for a job well done.

HENRY HIXON MEYER
President



REPORT OF THE TREASURER

BALANCE SHEET

September 30, 1964

ASSETS

Cash in Bank and on Hand		\$ 1,234,912.84
Investments — Book Value:		
Securities	\$6,390,079.22	
Interest in parcel of real estate	1.00	
Sealed envelopes	2.00	6,390,082.22
Accounts Receivable:		
Patients — less reserve for doubtful accounts	\$ 294,627.98	
Miscellaneous	11,136.22	305,764.20
Inventories of Supplies, etc.		51,647.85
Unamortized Pension Costs (see note)		173,017.11
Plant:		
Land and buildings	\$3,505,522.19	
Furniture, fixtures and equipment	555,174.38	
	\$4,060,696.57	
Less: Reserve for depreciation	1,447,847.79	2,612,848.78
Construction in Progress		132,316.15
TOTAL		<u>\$10,900,589.15</u>

LIABILITIES AND FUNDS

Advances from Patients	\$ 8,702.64
Accounts Payable and Accruals	230,730.79
Special Funds	13,248.55
General Fund	1,517,459.06
General Pension Reserve	682,607.34
Permanent Funds — Income Restricted	1,415,901.87
Permanent Funds — Income Unrestricted	2,707,071.18
Special Purpose Funds	539,740.27
Unexpended Restricted Income of Permanent Funds	182,464.82
Temporary Funds	451,592.39
Funds Invested in Plant	2,612,848.78
Plant Depreciation Fund	180,052.67
Undistributed Security Gains	358,168.79
TOTAL	<u>\$10,900,589.15</u>

NOTE: Under the terms of pension plans adopted September 5, 1955, the Infirmary funded fully, by transfer from Principal of the General Fund, the entire amount of liability for past service benefits as calculated by its consulting actuaries. As of October 1, 1962, the amount by which such prepayments are chargeable to

future operations of the Infirmary was reclassified as a deferred charge, to be amortized at the annual rate of \$16,400 over the estimated average remaining service lives of participants from that date.

CONDENSED INCOME ACCOUNT

for the year ended September 30, 1964

Gross Charges for Services to Patients		\$3,431,838.58
Adjustments to Gross Charges:		
Allowances to patients	\$191,790.20	
Allowances to contracting agencies	30,202.16	
Allowances to Blue Cross	67,381.10	
Provision for uncollectible accounts	40,231.84	329,605.30
Net Revenue from Services to Patients		\$3,102,233.28
Other Operating Revenue		307,935.96
Total Operating Revenue		\$3,410,169.24
Hospital Operating Expenses		
(including provision for depreciation — \$130,320.19)		3,604,845.40
Hospital Operating Loss		\$ 194,676.16
Donated Income:		
United Community Services	\$ 25,327.00	
Estates of Elisha V. Ashton, G. Gorham Peters and Others	17,543.61	42,870.61
Hospital Net Loss		\$ 151,805.55
Unrestricted Investment Income from Permanent Funds,		
less Applicable Expenses		259,655.39
Investment Income in Excess of Hospital Net Loss		\$ 107,849.84
Provision for Share of Expenses of Affiliated Hospitals Center, Inc.....		35,250.00
Balance — Transferred to General Fund		\$ 72,599.84
Note: During the year, hospital operating expenses aggregating \$82,573.13		
were charged directly against Permanent and Temporary Funds as follows:		
Against Permanent Funds — Income		\$ 14,611.95
Against Temporary Funds		67,961.18
		\$ 82,573.13

AUDITORS' CERTIFICATE

Massachusetts Eye and Ear Infirmary
Boston, Massachusetts

We have examined the balance sheet of MASSACHUSETTS EYE AND EAR INFIRMARY as at September 30, 1964 and the related income account for the year ended at that date. Our examination was made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the accompanying balance sheet and related

condensed income account with their explanatory notes, present fairly the financial position of Massachusetts Eye and Ear Infirmary at September 30, 1964 and the results of its operations for the year ended at that date, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding period.

PATTERSON, TEELE & DENNIS

Boston, Massachusetts
January 5, 1965

SUMMARY OF SECURITIES

(as of September 30, 1964)

GENERAL FUND	BOOK VALUE	MARKET VALUE	% OF TOTAL MARKET VALUE
BONDS:			
U. S. Governments	\$2,489,873	\$ 2,472,928	20.8
Canadian Governments	29,400	27,225	.2
Railroads	165,225	152,197	1.3
Utilities	635,425	621,819	5.2
Industrials	361,255	351,944	2.9
Financial	147,991	150,223	1.3
Miscellaneous	52,900	not valued	—
TOTAL BONDS	\$3,882,069	\$ 3,776,336	31.7
PREFERRED STOCKS	\$ 80,965	\$ 100,645	.8
COMMON STOCKS:			
Railroads	\$ 116,049	\$ 350,744	2.9
Utilities	378,888	1,433,168	12.0
Industrials	1,325,346	4,566,980	38.4
Financial	297,225	766,808	6.4
Insurance Companies	182,155	654,703	5.5
Miscellaneous	25,000	64,725	.5
TOTAL COMMON STOCKS	\$2,324,663	\$ 7,837,128	65.7
TOTAL GENERAL FUND	\$6,287,697	\$11,714,109	98.2
WEBER FUND (Bonds)	\$ 11,507	\$ 11,318	.1
WINTHIROP FUND (Bonds & Stocks)	\$ 90,875	\$ 197,475	1.7
TOTAL SECURITIES	\$6,390,079	\$11,922,902	100.0%

HORACE W. FROST
Treasurer

REPORT OF THE DIRECTOR



During the past year, hospitals in Metropolitan Boston and in the State of Massachusetts as a whole have continued their efforts to attract well-qualified personnel in competition with the industrial labor market. Over the past decade, great strides have been made by agencies in the health care field in improving their competitive position. The Infirmary has been in the forefront of this movement. Beginning in April, the Infirmary gave every employee having at least six months service an individual Blue Cross hospitalization contract, providing for full semiprivate care. This additional fringe benefit has been enthusiastically received by the employees. As in the past, eligible employees may, at their own expense, add Blue Shield and Prolonged Illness coverage for themselves, and Blue Cross, Blue Shield and Prolonged Illness for their families.

In October, employees received another benefit. For the second time in ten years the hospital pension plan was liberalized and the Contributory and Non-Contributory Plans were consolidated under one plan. At the same time, an excellent term life insurance program on a group basis was instituted. All eligible employees with one year or more of continuous service, whose regularly scheduled workweek is twenty hours or more, were covered by life insurance as follows:

<i>Length of Service</i>	<i>Death Benefit</i>
1 to 9 years	50% of 1 year's base salary
10 to 19 years	75% of 1 year's base salary
20 years or more	100% of 1 year's base salary

The total cost of the plan is paid for by the hospital. The insurance is carried by the Massachusetts General Life Insurance Company, a newly organized life insurance company with its headquarters in Boston. This insurance has been made available through the Boston Hospital Council.

Also, the hospital has instituted a tax-sheltered annuity program on a voluntary basis for those in key positions who want to participate in a method of saving which takes advantage of a recently enacted provision of the Internal Revenue Code. This provision permits the Massachusetts Eye and Ear Infirmary, because of its non-profit status, to purchase annuities for employees in key positions in amounts up to sixteen and two-thirds per cent of present salary. The amount of the annuity premium thus diverted from each annuitant's pay is not reported as taxable income for income tax purposes. The annuity is owned by the employee and its value increases with each premium payment. Income taxes are of course payable by the employee or his beneficiary on the annuity payments in the future year or years when paid out by the insurance company. This program is administered by the hospital with the National Life Insurance Company of Vermont.

With these new fringe benefits added to the usual two to four weeks' vacation, twelve day sick leave accumulative to fifty days, ten holidays and social security payments, the total fringe benefits amount to approximately nineteen and one-half per cent of an employee's pay check.

In June, Massachusetts House Bill 2906, which included hospitals in the coverage of the State Labor Relations Law, was passed by both Houses of the Legislature and signed by the Governor. When the bill becomes law on January 1, 1965, hospitals in Massachusetts for the first time will be legally bound to recognize duly constituted bargaining units of nurse and practical nurse employees. The law contains a "no strike" clause and also a section requiring compulsory arbitration of disputes and grievances in health care facilities.

With over sixty-seven per cent of all costs of operating the hospital in pay roll, it was decided that it

was time to set up a Personnel Office physically located in the Infirmary. For many years, the Eye and Ear has shared the personnel facilities of the Massachusetts General Hospital, an arrangement which has worked out in a most satisfactory way for both institutions. However, with the growth of the Infirmary, both in pay roll and in numbers of employees, it was agreed that the time had come for this change. The new employment office will be located in the present Nurses' Classroom with an entrance from Charles Street. The Nurses' Classroom will move into the first floor of the Gardner Building. It is felt that the new Personnel Office will be a worthwhile investment.

In August, the Infirmary was inspected by the Joint Commission on Accreditation of Hospitals and accreditation was approved for the next three years. The report of the Commission stated that our hospital was commended for the high quality of patient care that it renders. The entire staff of the hospital should feel rewarded for their many hours spent each year in committee and staff meetings for the sole purpose of making the Eye and Ear Infirmary a better hospital.

In this, the 140th year of the Infirmary, it is interesting to compare the medical care available today with that given in 1827. Reports and medical records of those early years are on the shelves of the Lucien Howe Library and can be taken on request from Mr. Snyder, our Archivist. They make fascinating reading. During the year, he has accumulated and cataloged a large volume of interesting historical material for the Archives.

The Lucien Howe Library of Ophthalmology and the Massachusetts Eye and Ear Infirmary's Library of Otolaryngology are great assets to the hospital. These libraries, which are a part of the Harvard University library system, are a valuable facility for our staff and, in fact, a reference library in our specialties for the whole community. The growth of these libraries can be reckoned in both size and service. There are now over 9,000 volumes on their shelves, and last year over 10,000 readers were served. Fortunately, we have several sources of special funds that make it possible for us to meet the annual budget that is now \$20,000.

During the summer, the librarian was asked to give a paper before the XIX International Congress for the History of Medicine in Basel, Switzerland. The paper that was read related the role that was played over seventy-five years ago by the Infirmary in the beginning of the controversial trachoma immigration

law. While in Europe, the librarian was able to purchase for the libraries a number of rare and historical books on ophthalmology and otolaryngology. These, along with similar items purchased at other times, are now on display in the Library.

A recent significant change in the hospital's Dietary Department was the addition of a Food Manager. Mr. Herbert Kirshnit joined the Infirmary in charge of all food service. During the year, we served 26,000 more meals than in the previous twelve months. The central food service, installed a year ago, continues to be an efficient operation and has drawn many favorable comments from our patients. As the company that installed our centralized tray service feel our operation is well carried out and uses the facilities to the best advantage, they have been responsible for bringing many hospitals' dietitians here to study our system. Consequently, we have been able to demonstrate our food service to well over two hundred people representing approximately eighty different hospitals. Happily, they all seemed quite pleased and many have decided to use our food service as a guide in their own building or expansion programs.

Reviewing statistics for the past year, we are pleased to report an increase, although a small one, in the number of patients admitted, the number of patient days in the hospital, the number of operations performed, and finally the number of clinic and emergency ward visits. Following the country-wide trend, the cost of operating the hospital also increased about six per cent to a new all time high. The major part of these higher costs resulted from higher wages. A substantial increase in salaries for professional nurses and licensed practical nurses was put into effect as of October 1, 1964. In April, routine service rates were increased two dollars and upward adjustments were made in anesthesia charges.

During the year, the Massachusetts General Hospital made major changes in their philosophy of operating the outpatient clinics. These changes had a direct bearing on the Eye and Ear Infirmary, because the outpatient clinics are a joint operation. The first change was to charge approximate cost for a patient's visit. The Massachusetts General Hospital's costs are running about ten dollars per visit. As a start toward reaching this figure, they increased clinic rates from four dollars and fifty cents to seven dollars in April. Another change was to accept all patients who come to the clinics, and to provide medical attention to those over-income patients who formerly were referred to the doctors' private offices.

A relaxed young patient visits the Eye Clinic's Refraction Room.



These moves were in the direction of treating all patients alike without distinction. Because of the relatively large volume of patients coming to the Eye and Ear clinics, Infirmary costs are still about four dollars and fifty cents a visit; therefore, no change was made in our rates. The Infirmary also continued to refer over-income patients to private doctors on our staff. A careful survey of the statistics since these changes were made by the M.G.H. in April shows little or no effect on the number of patients coming to the Eye and Ear clinics. At the year's end, plans for improving the physical facilities of the clinics were well along.

Construction projects completed during the twelve months included the new addition to the Eaton-

Peabody Laboratory, the Ophthalmic Basic Science Teaching Room in the Nurses' Residence financed by a gift from the late Mrs. Annette S. Hill to the Harvard Medical School, and the complete renovation of the doctors' dressing room. These changes will help to carry us through until a major expansion of all our physical facilities can be accomplished. The report of the President summarizes the various possibilities being actively considered. Clearly we are closer than ever to a solution of the space handicap which has been our principal problem.

FRANCIS S. HILL
Director

COMPARATIVE STATISTICS

HOSPITAL

	1963	1964
Service Patients—Eye Cases	1,630	1,395
Ear, Nose and Throat Cases	1,471	1,348
<i>Total Service Patients Admitted</i>	3,101	2,743
Private Patients—Eye Cases	3,485	3,862
Ear, Nose and Throat Cases	3,322	3,619
<i>Total Private Patients</i>	6,807	7,481
TOTAL PATIENTS ADMITTED	9,908	10,224
Operations, Service—Eye Cases	1,585	1,464
Ear, Nose and Throat Cases	1,233	1,279
Operations, Private—Eye Cases	3,826	3,927
Ear, Nose and Throat Cases	3,223	3,234
TOTAL OPERATIONS	9,867	9,904

CLINICS

New Patients—Eye Clinic	4,538	4,424
Ear, Nose and Throat Clinic	2,602	2,685
TOTAL NEW PATIENTS	7,140	7,109
Revisits—Eye Clinic	44,890	44,983
Ear, Nose and Throat Clinic	18,197	18,369
TOTAL CLINICAL REVISITS	63,089	63,352
Visits—Eye Clinic	49,428	49,407
Ear, Nose and Throat Clinic	20,799	21,054
TOTAL CLINICAL VISITS	70,227	70,461
Emergency Patients Admitted to Hospital	412	376
Patients Admitted to Emergency Ward	10,496	13,296

COMPARATIVE STATISTICS

	1963	1964
Patient Days Care — Service	18,317	15,248
Private	34,582	38,715
TOTAL PATIENT DAYS CARE	52,899	53,963
Average Number of Patients Treated Daily—		
Service	50	42
Private	95	105
TOTAL AVERAGE TREATED DAILY	145	147
Average Number of Days Patients Remain—		
Service	5.9	5.2
Private	5.1	5.5
Beds Available and Per Cent of Occupancy—		
Service	67 73%	68 62%
Private	105 92%	110 96%
TOTAL BEDS AVAILABLE	172	178
Per Capita Cost Per Day—Service, Routine Care	\$28.62	\$28.33
Special Services	14.04	15.28
TOTAL COST PER DAY PER SERVICE PATIENT	\$42.66(A)	\$43.61(A)
Per Capita Cost Per Day—		
Semi-Private, Routine Care	\$31.80	\$31.47
Special Services	15.60	16.98
TOTAL COST PER DAY PER SEMI-PRIVATE PATIENT	\$47.40(A)	\$48.45(A)
Per Capita Cost Per Day—		
Private, Routine Care	\$36.57	\$36.19
Special Services	17.94	19.53
TOTAL COST PER DAY PER PRIVATE PATIENT	\$54.51(A)	\$55.72(A)
Condition of Patients on Discharge—Died	13	24
Autopsies	62%	38%
Discharged	9,896	10,193

(A) Overhead Ratio 27%



DEPARTMENT OF OPHTHALMOLOGY

The past year, the present year, and the next few years comprise crucial periods in the affairs of the ophthalmic service as we try to plan for the new Infirmary and for its future part in the new Affiliated Hospitals Center at the Harvard Medical School. We shall do our utmost to maintain, so far as possible, an integrated ophthalmic community in Boston and avoid the divisions which have beset so many other cities as they approached critical mass size. The strength of the Infirmary has been its centralization of ophthalmology and otolaryngology in New England. This is a legacy we hope to preserve.

STATISTICS

With an annual load of 50,000 patient visits, the Eye Clinic constitutes one quarter of all the outpatients coming to the combined facilities of the Infirmary and the Massachusetts General Hospital. It is the largest single clinic in the complex, yet it occupies less than one-tenth of the outpatient area. Pressure for growth is especially severe in the subspecialty clinics, the Emergency Rooms, and the waiting area. Despite the severely restricted space, a new system for handling over-income patients was put into effect this past year whereby patients may have a private physician assigned to them for an initial examination at the Infirmary. Another innovation of the past year is the planning of individual examining rooms in part of the clinic. This will permit us to test whether this method or the present open-range method of examination is the more effective. The results will bear importantly on plans for the new hospital.

During the past year the Retina Service examined 2,016 patients of whom 267 were operated upon, an eight per cent increase over the preceding year. New

techniques included combining intravitreal injections with scleral buckling procedures, and utilization of a specially constructed operating table for patients with giant retinal breaks.

The Cornea Service examined approximately 4,500 patients and performed 48 transplants and 24 other corneal operations during the past year. The Glaucoma Consultation Service had 5,280 patient visits with two or three members of the staff working full time. It is here that tonographies, gonioscopies, and various studies on ocular hydrodynamics are done.

The Scleral Contact Lens Service has, for the past four years, been evaluating the usefulness of scleral lenses for corneal conditions not otherwise amenable to treatment. Approximately 45 new patients have been fitted each year. With Dr. Stone's departure the study will be continued by Dr. Carroll under the aegis of the Cornea Service.

The Ocular Motility Clinic had approximately 5,000 patient visits this past year. A special study was made of the much-talked-about methods of pleoptic treatment and the conclusion was reached that the results do not warrant the expense to the patient in time and money.

The Neuro-ophthalmology and Howe Laboratory Consultation Services have provided facilities for studying special problems and for integration of the eye department with services of the Massachusetts General Hospital. These services are believed to provide useful functions for patients, ophthalmologists, residents, trainees and other physicians.

The Refraction Clinic has, of course, carried its usually heavy load (approximately 9,000 patient visits) and, in addition, has established a consultative facility for private patients with subnormal vision who might be benefited by optical aids.

The Eye Pathology Laboratory processed this past year somewhat more than 700 specimens. The major-

ity of these were tissues from the lids, conjunctiva and orbit, but many were whole eyes removed in the Infirmary's operating rooms or obtained at autopsy from the Massachusetts General Hospital.

No less than 1,712 patients were referred this past year to the Social Service Department from the Eye Service for assistance in financial, emotional, and other problems. Weekly conferences were held with the residents in connection with hospitalized patients. Group meetings of glaucoma patients are planned for the near future.

EDUCATION

Teaching and training at the Infirmary is wide in scope and diverse in organization. We currently have seventeen residents on the clinical eye services and five fellows in a pre-residency status. The number of clinical residents will shortly be increased to twenty-two. The teaching of students at the Har-

vard Medical School has been reorganized under the direction of Dr. Scott with emphasis on methods of ophthalmic examination during the immediately pre-clinical period. The practical exercises at the Infirmary will continue during the clinical year much as they have in the past. The annual postgraduate course under Dr. Allen's supervision has acquired at long last adequate teaching space in the basement of the Nurses' Residence through a bequest under the will of the late Mrs. Annette S. Hill. The several postgraduate courses of the past year included a three-day course by the Retina Service, a course on glaucoma by the Glaucoma Consultation Service under the sponsorship of the New England Ophthalmological Society, and a two-day symposium organized by the Cornea Service on corneal research. But the bulk of teaching, in which almost everyone participates, occurs at a less formal level in daily visits, weekly conferences, and innumerable other contacts throughout the year.

A resident on the Neuro-ophthalmology Consultation Service measures peripheral vision.



PROFESSIONAL PERSONNEL AND ORGANIZATION

The chief executive officer of the staff in charge of clinical affairs of the Eye Service is Dr. Johnson. It is through his office that most administrative matters pass relative to the clinics and hospital. Special problems are referred to the Board of Surgeons who meet collectively once a month and each of whom, with the exception of myself, is responsible for one day a week in the clinic. The rest of the ophthalmic staff, comprising approximately sixty ophthalmologists assigned to individual Service Days, participate in organizational activities of their respective Services and in over-all affairs through staff meetings each trimester. It is this large voluntary staff and their colleagues in the research laboratories who, contributing generously of their time and talents, make the Infirmary the democratic institution that it is. And as in all true democracies, policy is made at all levels.

The subspecialty clinics represent the combined efforts of many physicians and technicians but each of these clinics or services has its chief, staff, and, in many cases, fellows and residents, attached to it. A new service, pediatric ophthalmology, is about to be launched in conjunction with the Children's Medical Center of Boston.

It is a pleasure to take note of several staff members and their particular activities of the past year: Dr. Dunphy who was elected to the Presidency of the American Academy of Ophthalmology and Otolaryngology; Dr. Stone who was appointed Chief of Research at the Cedars-Sinai Medical Center in Los Angeles, California; Dr. Sullivan who was President of the New England Ophthalmological Society; Dr. Sloane who received a citation from the Eye Bank Association of America for his work in the field of subnormal vision; Mr. Snyder who was an invited delegate to the International Congress for the History of Medicine; Dr. Friedman who was a representative of the American Microcirculatory Society at the International Congress of Microcirculation; and Dr. Kinoshita who was made a Trustee of the Association for Research in Ophthalmology.

It is also a pleasure to acknowledge special services to the Infirmary: Dr. Easton for organizing the roster

system of physicians for servicing over-income patients; Dr. Allen for obtaining quarters for post-graduate teaching; Dr. Herm for editing an intramural news bulletin; and Drs. Reinecke and Carroll for assistance in establishing an adequate cross-index system of patients and diagnoses.

RESEARCH

Between the three domains of patient care, research, and teaching, there is no sharp boundary. They form a composite three-dimensional picture which informed persons will see in depth. The ophthalmic research operations at the Infirmary are an important part of the clinical and teaching activities. Most, but not all, are carried out in the Howe Laboratory which is a joint operation of the Infirmary and the Harvard Medical School. Studies here during the past year have included practical problems in the treatment of glaucoma, histopathologic investigations of retinal degeneration, biochemistry of cataract formation, various clinical and physiologic studies on the visual nervous system, immunology with special reference to corneal transplants, development of optical instruments, and a miscellany of other investigations. These will not be further annotated here as they are described at some length in the Annual Report of the Howe Laboratory, but they do constitute a major aspect of the Infirmary's functions and strength.

CONCLUSIONS

We are in a crucial and exciting period for the Infirmary where the dominant consideration is planning for a new hospital and new relationships to other hospitals. Our job is to provide the best possible organization where ophthalmologists, scientists, and the public may join in the common humanitarian effort to advance ophthalmology and to provide optimal care to those with eye disease.

DAVID G. COGAN, M.D.
Chief of Ophthalmology

DEPARTMENT OF OTOLARYNGOLOGY



It is not possible, in this short report, to mention the contributions that each staff member has made during the past year. Their donation of time and effort to teaching, patient care, and research often carried no reward except a sense of achievement toward the common objective of alleviation of diseases of the nose, throat, and ears. The clinicians are in need of more hospital beds and the research staff of more laboratory space. In spite of long delays in hospital admissions and extremely crowded working conditions, the staff has worked efficiently and effectively. The inadequacies of the present physical plant have been accepted without too much grumbling, for it is apparent that the Board of Managers is aware of our needs and is expediting plans to relieve the space problem.

The Medical Staff of the Department of Otolaryngology consists of 41 qualified otolaryngologists, three plastic surgeons, one neurologist, one radiologist, and one pathologist, some of whom spend part-time in research. The Research Staff consists of seven full-time doctoral investigators, several of whom spend a small amount of time in clinical work, and twenty-one laboratory assistants and technicians.

TEACHING

Four years' training beyond internship is required to qualify for examination by the American Board of Otolaryngology. Residents enter our program after one year's training in an approved general surgery residency. Five applicants are appointed each year who rotate through a series of duties, of generally increasing responsibility, for three years. In recent years these appointments have become more attractive and highly competitive because of the increased breadth of our specialty through advancements in head and neck surgery and in otology.

About 120 third-year students from the Harvard Medical School receive clinical and didactic instruction in otolaryngology each year in the outpatient clinic and wards of the Infirmary. The importance of providing an effective learning experience for these students must not be underestimated for, in a short time, they become licensed physicians and many will never again be exposed to concentrated teaching in the specialty.

PATIENT CARE

Last year there were 21,054 visits to the outpatient clinic, 1,348 admissions of service cases to the Infirmary, and 1,279 surgical procedures on service patients. In addition, 3,619 private patients were admitted, of whom 3,234 received surgical procedures.

The schedule of the outpatient clinic, which previously was in session each Monday through Saturday from nine until one, has been changed to two sessions, nine until twelve and one until four, Monday through Friday. Previously all new patients were seen without appointments, which created a very irregular census and often much waiting for the patient. Now all patients, whether for a new or return visit, are seen by appointment. All patients in distress are cared for whenever they arrive. Most patients pay a small fee for outpatient care but, of course, the indigent pay nothing. All professional care is carefully supervised by the volunteer staff of qualified specialists. Middle ear reconstructive surgery performed on service patients is supervised by nine staff members in rotation who have special interest and training in this difficult surgery.

The Otoneurology Service has now been in operation for one year under the supervision of a board-qualified neurologist. Patients are referred to this service for the study, diagnosis, and treatment of

neurological disorders relating to otolaryngology, and especially for vertigo and facial nerve palsy.

The Endoscopy Service is particularly concerned with the removal of foreign bodies from the upper respiratory tract, throat, and esophagus. A highlight of the service is the endoscopy course in which the residents learn to remove foreign bodies from the bronchial tree and esophagus.

The Esophageal Speech Clinic registered 143 new laryngectomies during the past year who came for this important instruction from New York, Canada, Florida, and Alaska, as well as from the New England area.

The Tumor Clinic exists for the purpose of insuring that each patient receives the advantage of the combined knowledge of specialists in surgery, radiology, chemotherapy, plastic surgery, and pathology. Last year 1,407 outpatient visits were made to the clinic, an increase of 196 over the previous year.

The increasing demand for sophisticated tests of hearing (such as speech discrimination, tests of auditory fatigue, etc.) is overtaxing the present audiology facilities consisting of four fully equipped sound-treated rooms. We are planning an expansion of this service.

The Social Service Department continues to play an important role in the management and disposition of patients. Patient Care Conferences are held weekly to bring physicians and social workers together to work out plans which will help patients better meet the problems imposed by illness.

The Pathology and Radiology Services continue to integrate diagnostic service and teaching in a most effective manner.

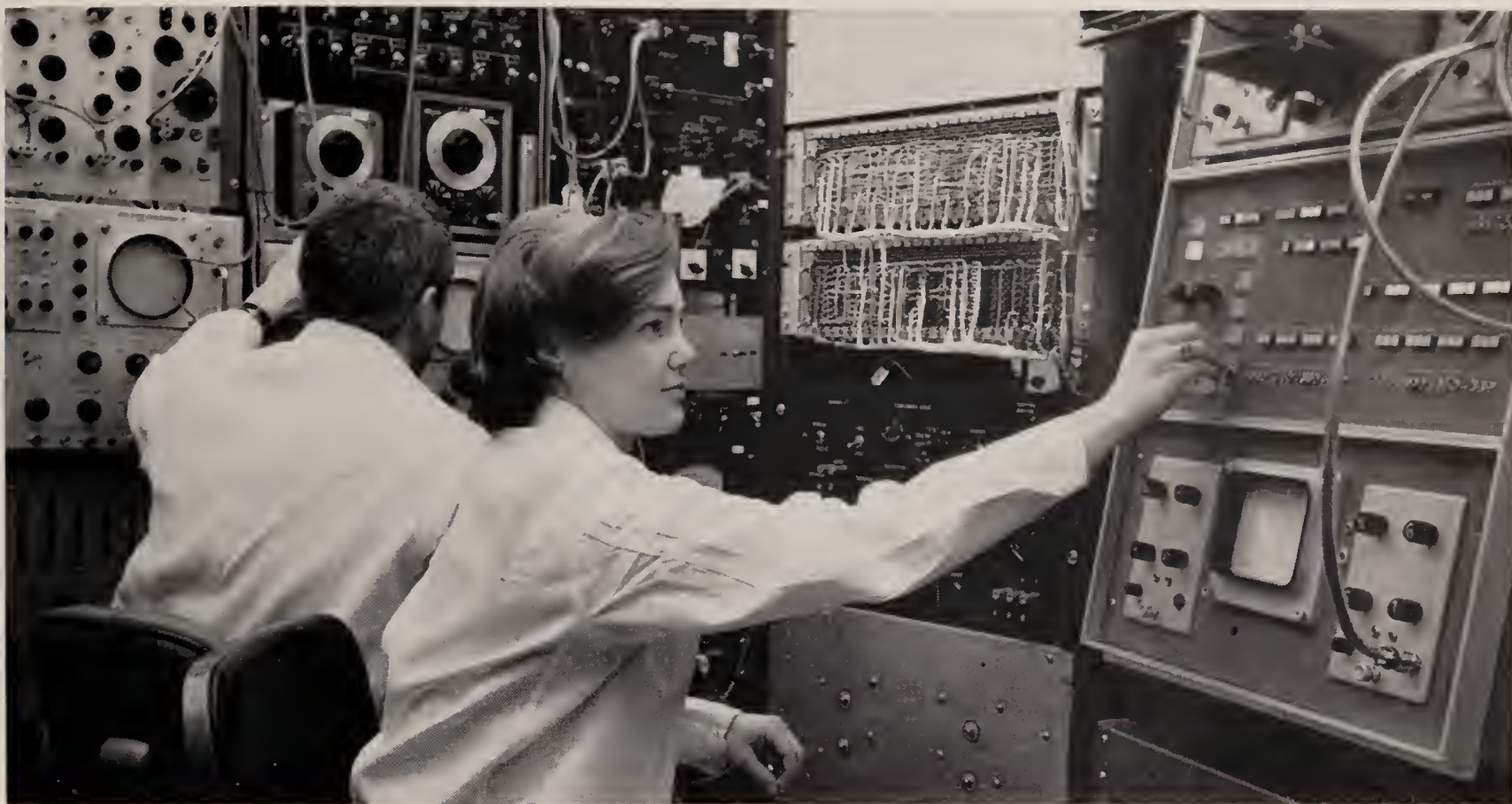
The Plastic Surgery Service has gained strength from the addition of two qualified specialists. This special service provides for our patients the best possible opportunity for the prevention or correction of facial deformities resulting from disease, surgery, or injury.

RESEARCH

The Electron Microscopy Laboratory has been in full operation for the past year. Most notable of the achievements of its personnel are a description of the morphology of the organ of Corti of man, a study of the vestibular labyrinth of guinea pigs, and an elucidation of the anatomical relationship between the hair-cell and the tectorial membrane.

A team from the Endoscopy Service performs a bronchoscopy to examine the patient's bronchi for signs of disease or a foreign body.





Rescarehers in the control room with the new LINK computer built in the Eaton-Peabody Laboratory.

The Microcirculatory Laboratory has been engaged this past year in studying the eirculation of the inner ear, intravascular emboli in the rabbit, and the effect of viruses on small blood vessels.

The Eaton-Peabody Laboratory has been expanded to twice its former size by the construction of an addition in the "back-yard" so as to aecommodate an increased program of research in auditory neurophysiology. The "on-line" use of the LINK computer has faeilitated the study of "inhibition" in auditory responses. The contributions from this laboratory are providing fundamental information basic to our understanding of how the nervous system functions.

The work in the D. Harold Walker Laboratory of Biochemistry has been expanded to include studies on the proteins and electrolytes of the inner ears of animals and humans. It appears that some types of deafness may be due to biochemical alterations in the inner ear and, if true, this could be extremely important work.

During the past year 198 animal and human temporal bones have been prepared and sectioned in the Histopathology Laboratory. The study of the pathology in ears of humans who suffered from deafness or vertigo during life continues to be a main activity of this group of investigators. Other studies performed in this laboratory relate to frontal sinusitis, nasal

physiology, drug deafness, stapes surgery, and mastoid surgery.

The research activities of the Histochemistry Laboratory have been directed toward elucidating enzyme patterns in health and in disease. The loss or alterations of enzymes has been implicated in many disease states and much work needs to be done in this important field of research.

OUR CHALLENGE

In general, it appears that the Department of Otolaryngology is keeping pace with the current explosion in medical technology and knowledge. As a matter of fact, several of our staff have made useful clinical and scientific contributions to our specialty during the past year. We cannot avoid the fact, however, that we are surrounded by disorders of the nose, throat, and ears. It is essential that we render the best possible aid to those who are now infirm and place their trust in us and that we constantly seek means for curing or, better yet, preventing these conditions.

HAROLD F. SCHUKNECHT, M.D.
Chief of Otolaryngology

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October 1, 1963—September 30, 1964

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JAMES H. ELLIOTT, M.D.
BISHARA M. FARIS, M.D.
H. MacKENZIE FREEMAN, M.D.

DENNIS B. FREILICH, M.D.
EEVA-LIISA MARTOLA GEHRING, M.D.
JEROME N. GOLDMAN, M.D.
JACK E. GOLDSTEIN, M.D.
W. REX HAWKINS, M.D.
ROLAND E. HOULE, M.D.
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PETER R. LAIBSON, M.D.

ROBERTO A. MOURA, M.D.
SILVIO VON PIRQUET, M.D.
SPIROS L. POLLALIS, M.D.
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DENIS B. SWEENEY, M.D.
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PAUL A. CHANDLER, M.D.

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TRYGVE GUNDERSEN, M.D.

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WILLIAM P. BEETHAM, M.D.

VIRGIL G. CASTEN, M.D.

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EDWARD E. COVITZ, M.D., Assistant Surgeon in Ophthalmology

PAUL G. HAIRE, M.D., Assistant Surgeon in Ophthalmology

LINLEY C. HAPP, M.D., Assistant Surgeon in Ophthalmology

OPHTHALMIC RESIDENT TEACHING

PAUL A. CHANDLER, M.D., Associate Director

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CHARLES L. SCHEPENS, M.D., Director

CORNEA SERVICE

CLAES-HENRIK DOHLMAN, M.D., Director

REFRACTION CLINIC

ROBERT D. REINECKE, M.D., Director

Scleral Contact Lens Service

JOHN M. CARROLL, M.D.

Corneal Contact Lens Service

PERRY ROSENTHAL, M.D.

OCULAR MOTILITY CLINIC

ANN E. STROMBERG, Orthoptist

OPHTHALMIC PATHOLOGY

TAYLOR R. SMITH, M.D., Director

TOICHIRO KUWABARA, M.D., Assistant

SENIOR CONSULTING OPHTHALMIC PATHOLOGIST

PARKER HEATH, M.D.

* Deceased, March 18, 1965

DEPARTMENT OF OTOLARYNGOLOGY

CHIEF OF OTOLARYNGOLOGY

HAROLD F. SCHUKNECHT, M.D.

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JOHN R. RICHARDSON, M.D.
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JOHN J. STAVROS, M.D.
PETER VAN ORMAN, M.D.
RICHARD D. ZONIS, M.D.

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COLIN S. KARMODY, M.D.

* Plastic Operations

** Neurology

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SENIOR CONSULTING SURGEON
FOR PLASTIC OPERATIONS

VARAZTAD H. KAZANJIAN, M.D.

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HERBERT FIELDS, M.D.

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ESOPHAGOSCOPY

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SURGEON FOR TUMOR CLINIC

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AUDIOLOGIST

Mrs. JUDITH G. CHASIN, M.A.

DIRECTOR OF ESOPHAGEAL VOICE CLASSES

Mrs. PAUL A. DOEHLER

DIRECTOR OF OTOLARYNGOLOGICAL PATHOLOGY

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HOWE LABORATORY OF OPHTHALMOLOGY

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SELMA HAYMAN, PH.D.

LORENZO O. MEROLA, B.S.

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RICHARD F. BRUBAKER, M.D.

ANTHONY B. NESBURN, M.D.

RICHARD A. THOFT, M.D.

BIOLOGIST

LEONA ZACHARIAS, PH.D.

RESEARCH ASSOCIATE, RETINA SERVICE

ERNST G. WOLF, PH.D.

DEPARTMENT OF OTOLARYNGOLOGY

EATON-PEABODY LABORATORY OF AUDITORY PHYSIOLOGY

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NELSON Y-S. KIANG, Ph.D.

DONALD K. MOREST, M.D.

WILLIAM B. WARR, Ph.D.

WILLIAM T. PEAKE, Sc.D.

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HILMI ARSLAN, M.S.

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S. PETER MARFEY, Ph.D.

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TETSUO ISHII, M.D.

ELECTRON MICROSCOPY LABORATORY

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JAVAD SHAMSAI, M.D.

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ISMAIL S. SENSEL, M.D.

ISMET SAKARYA, M.D.

FLORA TOLENTINO, M.D.

DUCK SANG YUN, M.D.

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ALEXANDER S. MACMILLAN, JR., M.D.

SENIOR CONSULTING ROENTGENOLOGIST

ALEXANDER S. MACMILLAN, M.D.

BACTERIOLOGIST

ANITA MANGIARACINE, A.B.

The members of the medical staff of the Massachusetts General Hospital are consultants to the Infirmary, and in this capacity become a part of the staff of the Massachusetts Eye and Ear Infirmary.

BOSTON EYE BANK

Serving New England

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EXECUTIVE SECRETARY — MARILYN D. BLACKMAN

EXECUTIVE COMMITTEE

DAVID G. COGAN, M.D.

BRENDAN D. LEAHEY, M.D.

MRS. RICHARD CARY CURTIS

HENRY HIXON MEYER

WESTON HOWLAND, JR.

MRS. WILLIAM A. SLADE, JR.

IN MEMORIAM

SAMUEL FORREST MARTIN, M.D.

May 23, 1906 — June 15, 1964

1936 — Resident in Ophthalmology

1938 — Clinical Assistant in Ophthalmology

1940 — Senior Clinical Assistant in Ophthalmology

1945 — Assistant Surgeon in Ophthalmology

WERNER MUELLER, M.D.

November 30, 1892 — August 17, 1964

1931 — Resident in Otolaryngology

1933 — Clinical Assistant in Otolaryngology

1940 — Assistant Surgeon in Otolaryngology

1948 — Director of the Mosher Pathology Laboratory

1962 — Senior Consulting Otolaryngological Pathologist

FORM OF BEQUEST

I give to the Massachusetts Eye and Ear Infirmary, a charitable corporation organized under the laws of Massachusetts, and situated at Boston, Massachusetts.....Dollars.



1965

THE Massachusetts Eye and Ear Infirmary is the second oldest hospital in the United States specializing in the treatment of diseases and other conditions of the eye and of the ear, nose and throat. It was established in 1824 as a free clinic for the treatment of the eye by Dr. Edward Reynolds and Dr. John Jeffries. The Infirmary was incorporated in 1827, and after years of steady expansion, the present building on Charles Street was constructed in 1899.

The Infirmary is a voluntary hospital — an independent, non-profit, private institution. Trustees, who are called the Board of Managers, are not paid, and the Medical Staff of specialists gives its services without charge to patients in the Clinics and to those patients who come into the hospital “on service”. The hospital receives no support from city or state but is financed by receipts from patients or public agencies responsible for them, by voluntary gifts and bequests, and by our allotment from the United Community Services as a participating agency. However, the Infirmary’s quota from the United Community Services is far below the amount the hospital gives in “free service” to patients from the Greater Boston area who cannot pay for their own care.

Though they are separate institutions, the Infirmary and its neighbor, the Massachusetts General Hospital, cooperate to give complete medical service to patients. The Clinics of both hospitals share a common Admitting Office with its entrance on Fruit Street.

The Cover

Reproduced on the cover is the Infirmary’s seal from an original woodcut mounted on the printer’s press. As required by the Commonwealth, the seal was designed shortly after the Infirmary was incorporated in 1827. The design is attributed to a committee which included Dr. Edward Reynolds and Dr. John Jeffries, co-founders of the Infirmary. Though it has

been slightly modified through the years, the design remains essentially as the original. The center of the seal depicts a blazing sun rising over the roaring sea in graphic illustration of the motto, *caeci vident, surdi audiunt, Deo Juv.* — the blind see, the deaf hear, with the help of God (Matthew 11:5).

MASSACHUSETTS
EYE AND EAR
INFIRMARY

One Hundred and Thirty-ninth

ANNUAL REPORT

Reports for 1965

Staff and Officers for 1966

as of February 1, 1966

243 CHARLES STREET • BOSTON, MASSACHUSETTS 02114

CORPORATION

WALTER H. TRUMBULL	1929*
ROBERT F. BRADFORD	1934
WILLIAM A. PARKER	1935
HENRY HIXON MEYER	1937
MRS. RICHARD CARY CURTIS	1940
HORACE W. FROST	1940
HON. EDMUND V. KEVILLE	1942
FREDERIC WINTHROP	1943
MRS. SULLIVAN A. SARGENT	1945
WILLIAM H. CLAFLIN, III	1947
MRS. JOHN W. FARLEY	1948
WILLIAM F. KEESLER, JR.	1948
ARTHUR T. LYMAN	1948
THE REV. ROBERT G. METTERS	1948
AUGUST R. MEYER	1948
MISS AMELIA PEABODY	1948
HON. LEVERETT SALTONSTALL	1948
FREDERICK H. VERHOEFF, M.D.	1948
NATHANIEL FAXON, M.D.	1949
FRANCIS W. HATCH, JR.	1951
ROBERT H. HOPKINS	1951
GEORGE L. PEW	1951
HOWLAND S. WARREN	1951
MELVILLE CHAPIN	1951
GEORGE A. McLAUGHLIN	1952
HENRY K. PORTER	1952
MRS. FRANCIS T. HUNTER	1953
MRS. VARAZTAD H. KAZANJIAN	1953
RICHARD P. CHAPMAN	1955
WILLIAM EIRLICH	1955
RICHARD HARTE	1955
WESTON HOWLAND, JR.	1955
WILLIAM L. SALTONSTALL	1957
LESLIE SOULE	1957
MRS. WALTER C. DODGE	1963
THOMAS B. FROST	1963
JOHN S. HOWE	1963
FREDERICK H. LOVEJOY	1963
THOMAS ALLSOPP	1963
MRS. JOHN DANE, JR.	1964
FRANK S. CHRISTIAN	1965
GEORGE M. LOVEJOY, JR.	1965
MRS. JOHN LOWELL	1965
FREDERICK C. ROZELLE, JR.	1965
GEORGE C. SEYBOLT	1965
FRANCIS S. HILL	1966

*dates indicate year of appointment

BOARD OF MANAGERS

HENRY HIXON MEYER,
CHAIRMAN

WILLIAM H. CLAFLIN, III,
PRESIDENT

HORACE W. FROST,
TREASURER

HON. EDMUND V. KEVILLE,
SECRETARY

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MELVILLE CHAPIN
MRS. RICHARD CARY CURTIS
MRS. JOHN W. FARLEY
ROBERT H. HOPKINS
WILLIAM A. PARKER
MRS. SULLIVAN A. SARGENT
WALTER H. TRUMBULL
ROBERT WALDMAN*
FREDERIC WINTHROP

**appointed by the Commonwealth*

DIRECTOR

FRANCIS S. HILL¹
CHARLES T. WOOD²

CHIEFS OF SERVICE

DAVID G. COGAN, M.D.
Ophthalmology

HAROLD F. SCHUKNECHT, M.D.
Otolaryngology

¹Through Dec. 31, 1965

²Effective Jan. 1, 1966



REPORT OF THE PRESIDENT

At the Annual Meeting of the members of the Corporation held on December 1, 1965, the by-laws were, at my suggestion, amended so as to provide for a Chairman of the Board in addition to a President. At the Annual Meeting of the Board of Managers held the same day I was elected to fill the new office, and William H. Claffin III was elected to succeed me as President. This action gives me great personal satisfaction because it entrusts the complex future of the Infirmity to the proven executive abilities of a younger man who ever since his election in 1947 as a member of the Corporation has demonstrated great interest in the affairs of the Infirmity.

At the same meeting of the Board of Managers, Charles T. Wood, Associate Director of the Infirmity, was elected as Director of the Infirmity to succeed Francis S. Hill when he retires on December 31, 1965, in accordance with the Infirmity's retirement rules. Mr. Wood received a Master's degree in hospital administration from the Medical College of Virginia. He joined the Infirmity on December 1, 1955, as Assistant Director and was appointed Associate Director on February 13, 1963. Thus he assumes the directorship of the Infirmity after much experience and with full knowledge of its problems, its aspirations and its obligations to the community it serves.

I am sure I speak literally for thousands in expressing to Francis S. Hill sincere appreciation for twenty years of devoted service to the Infirmity. The directorship of a hospital is not a sinecure, for obviously it must operate around-the-clock and is dealing in matters of life and death. Emergencies, varying in degrees of magnitude but still requiring immediate action, arise day and night and must be considered by the Director and frequently by the

President. The intimate contacts Mr. Hill maintained with every administrative department resulted in a high degree of efficiency and economy in the operation of the Infirmity and enabled him quickly to provide me with detailed and correct information on every problem with which I had to deal. The comparative figures contained in the Report of the Director detailing some of the major changes which have taken place in the last twenty years deserve study. For example, they show that the annual rate of occupancy of hospital beds has risen from 68% in 1945 to 85% in 1965. The latter rate is fantastically high for a short-stay specialty hospital where patients remain over weekends only when forced to do so. It evidences admission policies and controls of the highest order for which the Director can properly claim credit. And on the more personal side, I thank him in behalf of all the Infirmity employees for the courtesy, and yes, real affection he has shown in all his dealings with them. It has been a happy ship in troubled waters.

In making this, my last report as President of the Infirmity, I hope I may be excused if I repeat as advice for the future an opinion I have expressed in earlier reports. Much is said in this computer age as to the efficiencies and economics which result from size and mass production; and not long ago I listened to a dissertation on the savings which would occur if all the manufacturers of nuts and bolts should get together in one giant plant. I have no doubt this philosophy applies correctly to nuts and bolts, but hospitals are dealing with people, sick people and their families, frequently beset with phobias and apprehensions. My association with the Infirmity for almost thirty years has led me to the judgment that in specialties such as ophthalmology and otolaryngology, the desired results, medically,



One hundred thirty-seven volunteers contributed 10,362 hours of service to the Infirmary during the past year.

economically and psychologically, can best be obtained in a hospital designed to care for about 250 in-patients adjacent to and cooperating with a hospital or group of hospitals providing general care. Larger units must by the very nature of things become institutionalized with consequent division of responsibilities and controls and loss of intimacy. Quality, whether in the care of patients, in research, in teaching, or for that matter in the manufacture of nuts and bolts, is the one characteristic which

carries distinction. May the Infirmary never settle for anything else.

Again, my sincere thanks to the administration, the medical staff and all the employees for another wonderful year of progress in spite of the need for more space in every department. I feel confident that this problem will be solved in the coming year.

HENRY HIXON MEYER
President



REPORT OF THE TREASURER

BALANCE SHEET

September 30, 1965

ASSETS

Cash in Bank and on Hand		\$ 960,971.16
Investments — Book Value:		
Securities	\$7,174,687.15	
Interest in parcel of real estate	1.00	
Sealed envelopes	2.00	7,174,690.15
Accounts Receivable:		
Patients — less reserve for doubtful accounts	\$ 344,015.68	
Miscellaneous	1,287.98	345,303.66
Inventories of Supplies, etc.		52,876.96
Unamortized Pension Costs (see note)		156,617.19
Plant:		
Land and buildings	\$3,670,933.13	
Furniture, fixtures and equipment	612,405.10	
	\$4,283,338.23	
Less: Reserve for depreciation	1,586,556.76	2,696,781.47
Construction in Progress		17,835.74
TOTAL		<u>\$11,405,076.33</u>

LIABILITIES AND FUNDS

Advances from Patients	\$ 18,977.28
Accounts Payable and Accruals	148,624.11
Special Funds	10,125.47
General Fund	1,913,751.16
General Pension Reserve	752,308.01
Permanent Funds — Income Restricted	1,548,445.00
Permanent Funds — Income Unrestricted	2,708,156.86
Special Purpose Funds	272,220.01
Unexpended Restricted Income of Permanent Funds	230,047.22
Temporary Funds	561,839.17
Funds Invested in Plant	2,696,781.47
Plant Depreciation Fund	114,013.49
Undistributed Security Gains	429,787.08
TOTAL	<u>\$11,405,076.33</u>

NOTE: Under the terms of pension plans adopted September 5, 1955, the Infirmary funded fully, by transfer from Principal of the General Fund, the entire amount of liability for past service benefits as calculated by its consulting actuaries. As of October 1, 1962, the amount by which such prepayments are chargeable

to future operations of the Infirmary was reclassified as a deferred charge, to be amortized at the annual rate of \$16,400 over the estimated average remaining service lives of participants from that date.

CONDENSED INCOME ACCOUNT

for the year ended September 30, 1965

Gross Charges for Services to Patients		\$3,731,262.94
Adjustments to Gross Charges:		
Allowances to patients	\$187,818.21	
Allowances to contracting agencies	51,506.88	
Allowances to Blue Cross	50,986.34	
Provision for uncollectible accounts	30,909.00	321,220.43
Net Revenue from Services to Patients		\$3,410,042.51
Other Operating Revenue		280,818.84
Total Operating Revenue		\$3,690,861.35
Hospital Operating Expenses		
(including provision for depreciation — \$138,967.28)		3,850,545.36
Hospital Operating Loss		\$ 159,684.01
Donated Income:		
United Community Services	\$ 33,382.00	
Estates of Elisha V. Ashton, G. Gorham Peters and Others	18,844.74	52,226.74
Hospital Net Loss		\$ 107,457.27
Unrestricted Investment Income from Permanent Funds,		
less Applicable Expenses		286,062.42
Investment Income In Excess of Hospital Net Loss — Transferred to General Fund		\$ 178,605.15
Note: During the year, hospital operating expenses aggregating \$67,251.12 were charged directly against Permanent and Temporary Funds as follows:		
Against Permanent Funds — Income		\$ 28,040.99
Against Temporary Funds		39,210.13
		\$ 67,251.12

AUDITORS' CERTIFICATE

Massachusetts Eye and Ear Infirmary
Boston, Massachusetts

We have examined the balance sheet of MASSACHUSETTS EYE AND EAR INFIRMARY as at September 30, 1965 and the related income account for the year ended at that date. Our examination was made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the accompanying balance sheet and related

condensed income account present fairly the financial position of Massachusetts Eye and Ear Infirmary at September 30, 1965 and the results of its operations for the year ended at that date, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

PATTERSON, TEELE & DENNIS

Boston, Massachusetts
December 6, 1965

SUMMARY OF SECURITIES

(as of September 30, 1965)

GENERAL FUND	BOOK VALUE*	MARKET VALUE*	% MKT. VALUE
BONDS:			
U. S. Government	\$2,886,248	\$ 2,847,011	22.4
Canadian Government	29,400	26,850	.2
Railroad	165,225	150,380	1.2
Utility	628,297	604,810	4.8
Industrial	335,712	320,659	2.5
Financial	146,936	144,920	1.2
Miscellaneous	62,900	not valued	—
TOTAL BONDS	<u>\$4,254,718</u>	<u>\$ 4,094,630</u>	<u>32.3</u>
TOTAL PREFERRED STOCKS	\$ 145,983	\$ 169,594	1.3
COMMON STOCKS:			
Railroad	\$ 116,049	\$ 330,035	2.6
Utility	472,290	1,547,106	12.2
Industrial	1,432,839	5,065,765	39.9
Financial	316,986	792,185	6.2
Insurance	159,912	430,903	3.4
Miscellaneous	25,000	67,600	.5
TOTAL COMMON STOCKS	<u>\$2,523,076</u>	<u>\$ 8,233,594</u>	<u>64.8</u>
TOTAL GENERAL FUND	<u>\$6,923,777</u>	<u>\$12,497,818</u>	<u>98.4</u>
WEBER FUND (Bonds)	<u>\$ 11,507</u>	<u>\$ 11,352</u>	<u>—</u>
WINTHROP FUND (Bonds & Stocks)	<u>\$ 90,875</u>	<u>\$ 206,784</u>	<u>1.6</u>
TOTAL SECURITIES	<u>\$7,026,159</u>	<u>\$12,715,954</u>	<u>100.0%</u>

* — Cents Omitted

HORACE W. FROST
Treasurer

REPORT OF THE DIRECTOR



Passage of "The Health Insurance for the Aged Act" — Medicare — was by far the most significant and far reaching event that occurred during the past year. The long range implications are enormous and will affect the future of all health care institutions for years to come. Kenneth Williamson, Associate Director of the American Hospital Association and Director of their Washington Service Bureau recently wrote . . . "Although some of the implications of this new law can be visualized at this time, there is much that cannot. Only time and experience will reveal its full impact. One thing is certain. It is a new day in health affairs. Things are not the same, either for hospitals, for surgeons, or the public. Things will never be the same again."

As to its impact on the Infirmary, it is interesting to note that over fifty per cent of our eye patients and over ten per cent of our ear, nose and throat patients are over sixty-five years of age. In the combined clinics, thirty per cent are over sixty-five. There is every indication that, at least at first, the effect of this new law will increase the demands on all our facilities. In anticipation, we have made extensive revisions in our ambulatory services. In the Eye Clinic, we have built individual rooms to replace the old refraction lanes and have instituted an appointment system in this area on a trial basis. Also, we have expanded the Cornea Clinic area to take care of this growing unit.

In the Ear, Nose and Throat Clinic, we have converted the former Hooper Room into laboratory and office space for the Otoneurology Clinic. During the year we also added another large hearing test room to supplement three we already have. Starting with the joint admitting area, we are refurbishing and redecorating all the clinic areas.

During the year we combined ancillary charges

into one rate for private, semi-private and service categories of patients. This single rate is based on actual cost, which is the same for all classifications. This change was made in anticipation of the reimbursement formula being developed for Medicare patients. Also, in anticipation of the internal changes required by the new legislation, we are in the process of installing a more versatile and faster computer. We hope that with this new equipment we will be able to coordinate and schedule bookings for all admissions, operations and anesthesia. With this information on the computer, we should be able to make maximal use of our physical facilities.

The costliest undertaking during the year is the contemplated installation of new x-ray equipment. Plans have been drawn for a complete replacement of all equipment in the fluoroscopy room and new control units in the other two rooms. Funds, amounting to \$70,000., are being requested for this essential equipment in the December Mail Appeal. Other renovations were made in the Gardner Building to make room for an office for the Purchasing and Personnel Departments.

Future planning for the hospital consumed many hours of time of both the Trustees and the Administration. A feasibility study was completed for possible expansion on our present site, and joint planning with our neighbor, the Massachusetts General Hospital, was carried on throughout the year to try to solve the hospital's need for additional space. Also, continued planning for our part in the Affiliated Hospitals Center in the Longwood area was active and continued throughout the year.

Temporary space has been rented in the Charles River Park area to supplement the laboratory facilities of the Eaton-Peabody Laboratory. Also, a duplex apartment was rented to provide offices for the clini-

cal research personnel who will be working at the hospital for the Eye Department's new Center Grant.

Costs continued to rise during the year as a result of increased wages and expenses and were up more than seven per cent over the previous year. Despite this, no change was made in room rates, although clinic charges were increased \$1.00 at the year end to \$5.50 per visit. Thus the activities of the hospital itself resulted in an operating loss of \$146,885 after depreciation. Treasurer's income, however, more than offset this operating loss.

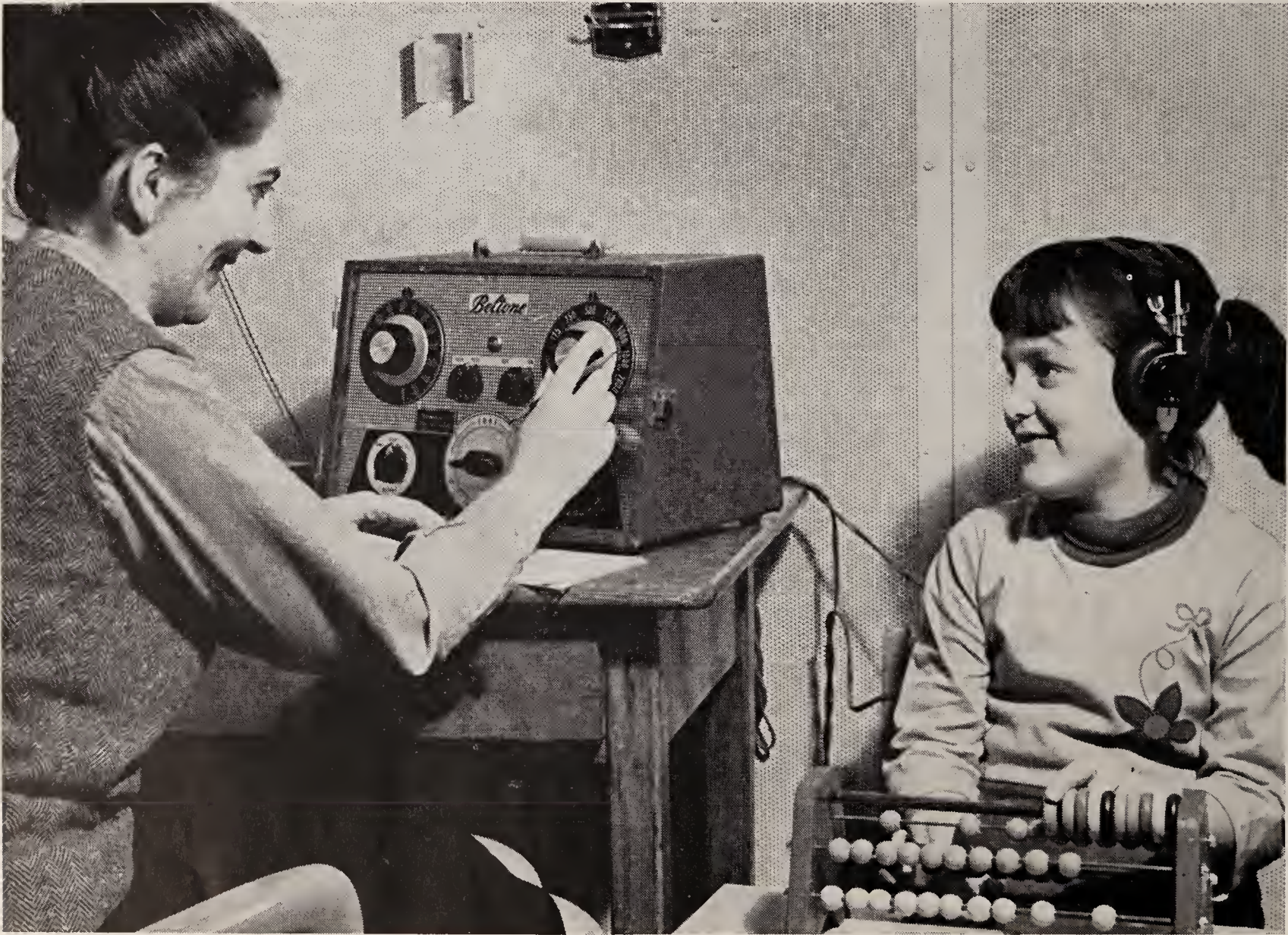
Statistically more patients were admitted, there were more operations, more clinic visits, and more Emergency Ward admissions than in any of the last few years, although the increase was not large.

As this is my last annual report after twenty plus years as Administrator of the Infirmary, it may be of interest to compare the state of the institution and to note some of the major changes which have taken place in these two decades.

	1945	1965
Endowments	\$ 2,450,000.00	\$13,000,000.00
Operating Budget	\$ 600,000.00	\$ 3,700,000.00
Average Cost per Patient Day	\$ 8.07	\$ 49.99
Number of Beds	227	180
Hospital Admissions:		
To Private Beds	1,602	7,313
To Service Beds	5,100	3,008
Total	6,702	10,321
Average Patient Stay	8.4 days	5.4 days
Clinic Visits	67,932	70,531
Emergency Visits	4,662	13,581
Research Budget	\$ 47,000.00	\$ 1,375,000.00
Number of Residents	15	33

While the foregoing comparisons really speak for themselves, it is especially gratifying to me that even without any land for expansion the Infirmary has been able to increase its service to the community in patient care, teaching and research in a substantial way.

A fourth sound-proof test room has enlarged the facilities of the Audiology Department.





Over 50,000 patient visits to the Eye Clinic this past year continue to make it the largest specialty clinic in New England.

During this twenty year span some \$2,500,000. has been spent for renovation and expansion. In the realm of patient care, the original four patient floors were modernized and transformed from open wards to multiple bed rooms, a new fifth floor of private single rooms was added and ten new operating rooms were built. The laundry was replaced by an efficient central supply area, the mechanized food service was installed and a number of private doctors' offices set up. For research, $3\frac{1}{2}$ floors of laboratory space, including the library, were added to the Connecting Building and the Eaton-Peabody Laboratory constructed in the backyard.

Despite this growth, the need for additional land on which to expand facilities for patient care, teaching and research is now greater than ever before. The New Boston and all that it implies in terms of added population and modernization requires that a new and much larger Massachusetts Eye and Ear Infirmary be built as soon as possible. Hopefully the necessary land, suitably located, will become available reasonably soon.

Looking to the future and to the many new problems with which the Infirmary will be faced, I hope that our three great assets will be safeguarded, come what may. These are the outstanding professional staff on which our patients depend, our close relationship with the Massachusetts General Hospital,

particularly in the area of patient care which is advantageous to both institutions, and our affiliation with the Harvard Medical School as one of its teaching hospitals.

A major threat is the possible loss of autonomy and ability to cater to the needs and even whims of our professional staff. It now seems probable that area planning fostered by the Government will play an important part in the future of the Infirmary. It also appears that the community leaders who are in a position to make area decisions may not have sufficient appreciation and understanding of the importance of maintaining an autonomous specialty hospital in a general hospital setting. Those who know the Infirmary best must see to it that its freedom to act independently is not sacrificed in the effort to acquire additional land for physical expansion.

I am confident that under the leadership of the Board of Managers, the two Chiefs and my successor as Director, the Infirmary will find the way to maintain its leadership in its specialized fields both in Boston and around the world. My thanks to them, to the members of the professional staff and to all the employees who have made the past twenty years such a happy experience for me.

FRANCIS S. HILL
Director

COMPARATIVE STATISTICS

HOSPITAL

	1964	1965
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Service Patients—Eye Cases	1,395	1,611
Ear, Nose and Throat Cases	1,348	1,397
	-----	-----
<i>Total Service Patients Admitted</i>	2,743	3,008
Private Patients—Eye Cases	3,862	3,929
Ear, Nose and Throat Cases	3,619	3,384
	-----	-----
<i>Total Private Patients</i>	7,481	7,313
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TOTAL PATIENTS ADMITTED	10,224	10,321
Operations, Service—Eye Cases	1,464	1,642
Ear, Nose and Throat Cases	1,279	1,236
Operations, Private—Eye Cases	3,927	4,142
Ear, Nose and Throat Cases	3,234	3,269
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TOTAL OPERATIONS	9,904	10,289

CLINICS

New Patients—Eye Clinic	4,424	4,184
Ear, Nose and Throat Clinic	2,685	2,971
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TOTAL NEW PATIENTS	7,109	7,155
Revisits—Eye Clinic	44,983	44,908
Ear, Nose and Throat Clinic	18,369	18,468
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TOTAL CLINICAL REVISITS	63,352	63,376
Visits—Eye Clinic	49,407	49,092
Ear, Nose and Throat Clinic	21,054	21,439
	-----	-----
TOTAL CLINICAL VISITS	70,461	70,531
Emergency Patients Admitted to Hospital	376	318
Patients Admitted to Emergency Ward	13,296	13,581

COMPARATIVE STATISTICS

	1964	1965
Patient Days Care — Service	15,248	18,372
Private	38,715	37,401
TOTAL PATIENT DAYS CARE	53,963	55,773
Average Number of Patients Treated Daily—		
Service	42	50
Private	105	102
TOTAL AVERAGE TREATED DAILY	147	152
Average Number of Days Patients Remain—		
Service	5.2	5.9
Private	5.5	5.2
Beds Available and Per Cent of Occupancy—		
Service	68 62%	66 76%
Private	110 96%	112 91%
TOTAL BEDS AVAILABLE	178	178
Per Capita Cost Per Day—Service, Routine Care	\$28.33	\$28.69
Special Services	15.28	16.31
TOTAL COST PER DAY PER SERVICE PATIENT	\$43.66(A)	\$45.00(A)
Per Capita Cost Per Day—		
Semi-Private, Routine Care	\$31.47	\$31.87
Special Services	16.98	18.12
TOTAL COST PER DAY PER SEMI-PRIVATE PATIENT	\$48.45(A)	\$49.99(A)
Per Capita Cost Per Day—		
Private, Routine Care	\$36.19	\$36.65
Special Services	19.53	20.85
TOTAL COST PER DAY PER PRIVATE PATIENT	\$55.72(A)	\$57.50(A)
Condition of Patients on Discharge—Died	24	12
Autopsies	38%	25%
Discharged	10,193	10,316

(A) Overhead Ratio 27%



DEPARTMENT OF OPHTHALMOLOGY

For as long as those of us now living can remember, the Infirmary's Department of Ophthalmology has enjoyed a unique role in the ophthalmology of New England. It has had a tradition of service that utilized well the services of private practitioners who gave generously of their time, and its past leaders have exemplified the qualities we hold most desirable. In the present era we want to earn a right for continued prestige, but we must prepare for the prospect of drastically different circumstances from those prevailing just a decade or two ago. Those of us charged with planning for the future must do all in our power to maintain the great benefits of our past with the altered responsibilities of the future.

Certainly the increase in welfare insurance by state and private means will considerably alter the type of service required of the Infirmary as well as the type of teaching material available to it. At the same time, the overwhelming expansion of technical specialization requires a diversity of programs not encountered in the same degree heretofore. We are committed to develop subspecialization as an inescapable response to the explosion of technology and knowledge. If we did not do this we would be derelict in our duties to the Infirmary and blind to its destiny. At the moment, we see the Infirmary's most serviceable future role as a consultation center for as much of ophthalmology as our means and space and, above all, talent will allow.

ORGANIZATION

The administration of the Department of Ophthalmology has become progressively diversified. Dr. Carl Johnson is Associate Chief in charge of the Clinical Services. Together with the Board of Surgeons and several committees, he supervises the

professional care of the patient. Drs. Henry Allen and Alfred Scott are in charge of Harvard's post-graduate and undergraduate teaching respectively. The several subspecialty clinics and their directors are listed elsewhere in this report.

Eye research is chiefly centered in the Howe Laboratory, a department of the Harvard Medical School situated at the Infirmary and closely coordinated with its clinical and teaching functions.

CLINICAL AND RESEARCH SERVICES

The patient visits to the Eye Clinic this past year totalled approximately 50,000, which is the same as in the immediately previous years, showing that the necessary escalation of charges has not lessened the calls for this service. Yet the crowding of the outpatient clinic is almost unbearable. On practically any morning this past year the corridors could be found crowded with patients, many of whom had to stand for an hour or more, and the clinic itself was so jammed with people that it was difficult to get from the main desk to the doctors' examining tables. No other clinic in the Infirmary-MGH complex has had such extreme crowding.

To get the most out of the space available, several of the outpatient rooms have been remodelled, abolishing the Refraction Room completely and incorporating refracting units in new multi-purpose examining rooms. Since this remodelling has just been completed, it is too early to draw conclusions on what effect it will have on the crowding. In any case, it can be little more than a stop-gap.

The inpatient service has been equally crowded. The inadequacy of bed space has forced many of the staff to settle for less-than-satisfactory accommodations elsewhere in general hospitals. We certainly are unprepared to cope with the anticipated impact

of Medicare. Not the least affected by crowding are the research laboratories and the library which have had to overflow into the corridors. Nearly half of the "permanent" staff of the Howe Laboratory have left, or are about to leave, for more spacious quarters in other institutions.

Yet we are planning for big things knowing that plans now will not come to fruition for several years. Much is predicated on the acquisition of the adjacent jail property for a new 300-bed Infirmary. Our Resident Eye Staff has been increased to twenty, about half of whom are supported by the National Institute of Health and are provided with a year of experience in the research laboratories prior to their clinical traineeship. A substantial award known as the Center Grant has been made to the Infirmary to develop its clinical research in ophthalmology. This will be accomplished largely through the subspecialty clinics by means of administrative appointments, fellowships, addition of equipment, and

employment of ancillary personnel. To facilitate operation of the Center Grant, space has been temporarily rented in an adjacent apartment house.

The most recent, and still tentative, plans for expansion are the development of a Vision Information Center to cope with the crisis of growing library needs. Largely because of our excellent Howe Library, the government has proposed to establish in Boston a library service that would serve the need of the nation for information on problems of vision. This is part of a plan for decentralization of the National Library of Medicine, and, in our case, would probably function with the Countway Library at the Harvard Medical School. Plans for this adventure are still in the state of preliminary discussion.

Each year brings many guests to the Infirmary from home and abroad. We had the unusual and pleasurable visitation this past year of a whole group. The Irish Ophthalmological Society came to Boston to hold a joint meeting with the New England



Ralph Morse, LIFE Magazine ©Time, Inc.

Preoperative examination of patient with giant retinal tear. By rotating the table into various positions it is possible to determine which position will unfold the giant retinal break. During part of the surgery the patient is placed in this position.

Ophthalmological Society. These guests of the Infirmary were housed individually at the homes of the Infirmary's staff.

HONORS AND THANKS DEPARTMENT

Honors and thanks must go to the many who fulfilled their functions throughout the year in the routine tasks that make for everyday living and serving. But we all owe a special tribute to those whose efforts went beyond the call of routine duty to do something extra, whether big or small, for the Infirmary. We might cite Dr. Simmons' editing of the Infirmary bulletin for ophthalmologists, Dr. Reinecke's assistance in the planning of the new OPD rooms and his administrative assistance in launching the Center Grant, Dr. West's and Mr. Snyder's crucial roles in arrangements for the visit of the Irish Ophthalmological Society, Dr. Easton's organization and supervision of a staff roster system, and several staff members' addresses before lay groups on the activities of the Infirmary. Also to be cited are those whose accomplishments have received public recognition, reaffirming the Infirmary's wide influence: Dr. Dunphy's distinction as the President of the American Academy of Ophthalmology and Otolaryngology, Dr. Gundersen's award of the Knapp Medal by the AMA, Dr. Allen's citation as Wanbli Ista (Eagle Eye) for his ophthalmic ministrations to the Oglala Sioux Indians, Dr. Kinoshita's receipt of the Friedenwald Award of the Associa-

tion for Research in Ophthalmology, Dr. Friedman's appointment as Chief of Ophthalmology at Boston University, and Dr. Cogan's award of the Howe Medals by the AMA and the American Ophthalmological Society.

No less gratitude is due to the many benefactors who supported the Infirmary this past year and those who contributed to some specific activity of the Ophthalmic Service. Of these latter we should particularly mention: the late Carl Lilliestrand, who left a portion of his estate to the Howe Laboratory (at the suggestion of his ophthalmologist); those many friends of Dr. Merrill J. King who established a fund for ophthalmic research in his memory; the Massachusetts Lions Eye Research Fund, which made possible an expansion in our facilities for electron microscopy; and numerous other beneficent individuals and organizations whose contributions to eye research are noted in the Annual Report of the Howe Laboratory.*

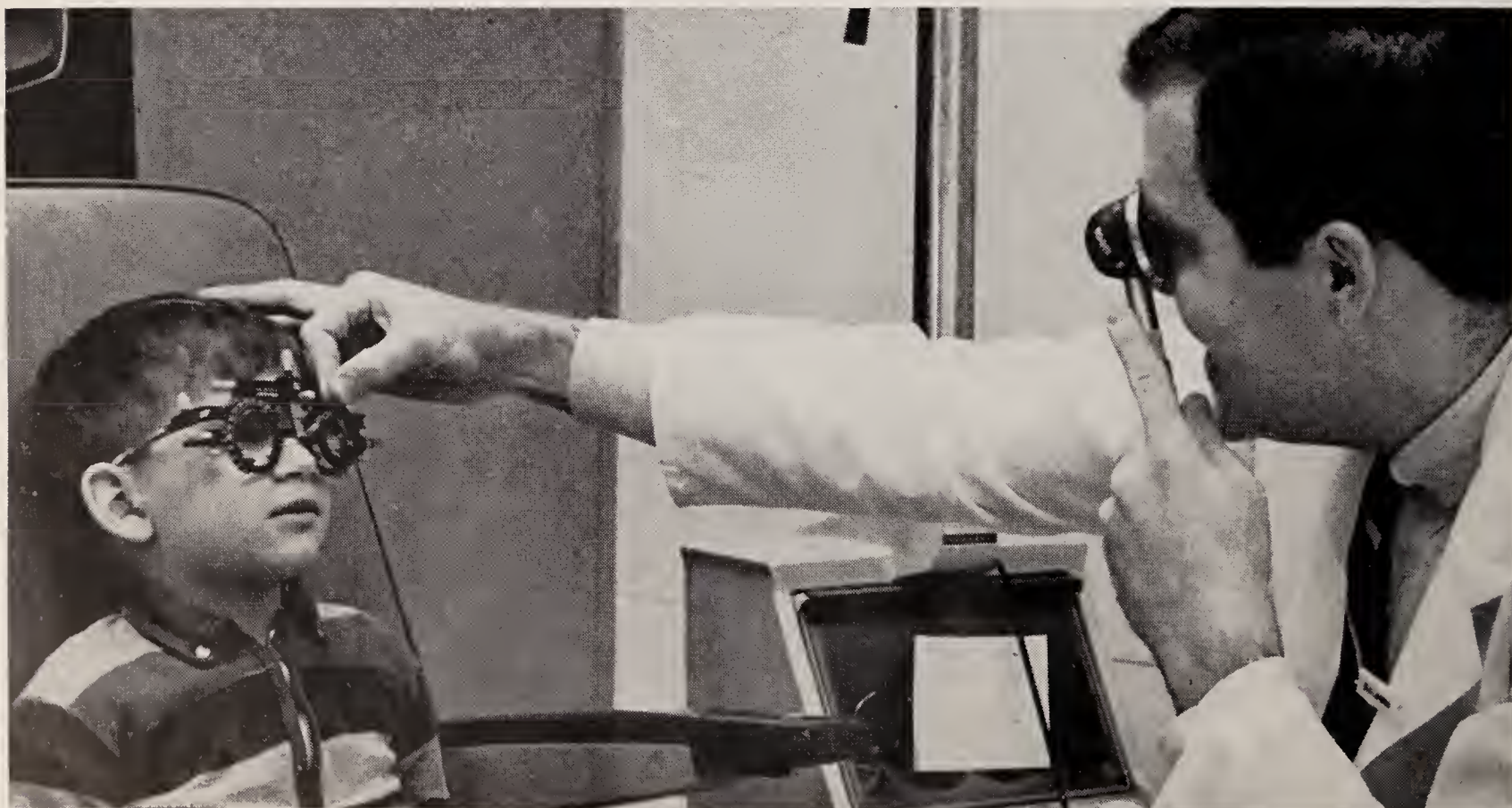
CONCLUSION

Like any virile organization, the Department of Ophthalmology has its problems and its aspirations. With the good will and assistance of the many who believe in it and what it stands for we can look forward to vigorous years ahead.

DAVID G. COGAN, M.D.
Chief of Ophthalmology

*Available on request

A small visitor is tested in one of the 5 new examining rooms in the Eye Clinic.



DEPARTMENT OF OTOLARYNGOLOGY



During the past year our staff has devoted much time and energy to achieving our objectives of patient care, teaching and research. It seems to me there has been a better distribution of effort in these three activities than previously. The clinical investigators have concentrated first on being good doctors and seeing to it that the patients are cared for before diverting their interests to research. The pure clinicians have made note of scientific developments and have integrated new ideas and methods into medical practice. The supervising staff has insured that teaching exercises have not created unnecessary inconvenience for the patients. The basic investigators have had frequent contact with the clinicians and consequently are better informed regarding the etiology and management of ear, nose and throat diseases.

Currently the medical staff of the Department of Otolaryngology consists of sixty-six otolaryngologists, three plastic surgeons, one neurologist, one radiologist and one pathologist. The full-time clinical staff of three otolaryngologists, one neurologist and one pathologist is responsible for most of the administrative duties and in addition, spends part of its time in research. In the Department there are seventeen doctoral investigators, of which seven are Ph.D.'s and ten are M.D.'s. The research laboratories are supported by twenty laboratory technicians.

PATIENT CARE

During the past year there were 21,439 patient visits to the outpatient clinic and 1,397 service patients were admitted to the hospital. Surgical procedures were performed on 1,236 service cases and on 3,269 private patients. In the management of general medical and surgical problems we rely heav-

ily upon the staff of the Massachusetts General Hospital. The transfer of patients between hospitals and joint efforts by the staff assures the best possible patient care.

The outpatient clinic schedule was altered last year to establish ten sessions instead of six to provide appointment times for all patients. This is working smoothly. Last year approximately 5,500 ear, nose and throat emergency cases were seen, most of which were cared for between the hours of 5:00 P.M. and 8:00 A.M. A wall-mounted operating microscope has been installed to facilitate emergency ear procedures.

The Tympanoplasty Service, which was initiated last year, performed 152 ear operations and appears to be functioning smoothly. The primary purpose of the Service is to standardize surgical technique so as to provide the best possible end result while providing the best teaching experience for the resident. Dr. John Kurkjian and Miss Edith Taggrin prepared an exhibit in stereophotography demonstrating the surgical steps, and it was shown at the Annual Meeting of the American Academy of Ophthalmology and Otolaryngology in Chicago in November.

The Plastic Service with Dr. Aram Roopenian as Chief performed 133 operative procedures including otoplastics, submucous resections, facial fractures, tumor surgery and reconstruction of facial deformities. These are the types of cases the otolaryngologist can expect to encounter in practice and are most important to the teaching program.

Dr. John Richardson supervised the Endoscopy Service. The only change made was to move the weekly Bougienage Clinic from the X-ray Department to the outpatient clinic.

Mrs. Doehler continues to manage a very active Esophageal Speech Clinic. During the period Oc-

tober 1, 1964, to September 30, 1965, she registered 169 new patients for speech instruction, 26 more than last year.

Our otoneurologist, Dr. Alfred Weiss, has been installed in new rooms in space previously designated as the Hooper Room. He is assisted part time by both an otolaryngology and a neurology resident. During the past year he provided consultation for 224 service cases and numerous private patients.

Dr. Daniel Miller has supervised the care of patients in the Tumor Clinic, to which there were 1,349 visitations last year. The joint efforts of surgeon and radiologist are paying big dividends in the results of treatment of cancer.

The Audiology Department under Mrs. Werner Chasin's direction is staffed by three full-time audiologists with Master's degrees. The Department has three complete diagnostic units in which about 500 patients are tested each month, of which two-thirds are service cases. A new service to patients includes that of hearing aid evaluation, where several hearing aid models are tested to find adequate amplification for the individual.

Social Service served 717 ear, nose and throat patients last year under Miss Madeline Shipsey's direction. Of these 529 were ear patients, 142 had tumors, 12 required plastic surgery and 34 had miscellaneous disorders. One-third of the ear patients required assistance in acquiring and adjusting to hearing aids.

During the year our pathologist, Dr. Karoly Balogh, examined 1,553 histological specimens and an additional 1,149 sets of adenoids and tonsils.

Dr. Alexander S. MacMillan, Jr., made 4,700 radiological examinations and interpretations for the Otolaryngology Department.

INSTRUCTION

The Harvard Medical School curriculum has undergone complete revision during the past two years. Dr. John Richardson, who is in charge of student instruction, has represented the Department in curriculum replanning. Under the new plan there are four or five medical students in attendance at all outpatient clinics, summer and winter. In addition the students, in groups of nine, receive a series of lectures and demonstrations from the Harvard Teaching Fellows (Senior Residents).

Saturday mornings are now reserved for teaching residents in the basic sciences and in clinical otolaryngology. All residents meet with either Dr. William Montgomery or with me from 11:00 to 12:30 on Saturdays for clinical conferences, at which time

difficult problem cases are examined and decisions made as to diagnosis and treatment.

Instruction and supervision of inpatient care of service cases by the residents is in the hands of six Service Chiefs, Dr. John Richardson, Dr. John Frazee, Dr. Joseph Lentine, Dr. Charles Drooker, Dr. Daniel Miller and Dr. Donald Lewis. Morning ward rounds are made at 7:00 A.M. and the surgery schedule begins at 8:00 A.M.

The weekly Clinical-Pathological Conference (CPC) is held from 11:00 - 12:00 A.M. on Wednesday and usually is followed by a lecture from an outstanding clinician or investigator. These conferences are attended by the entire staff, including nurses, students, audiologists and visiting clinicians and provide an opportunity for dissemination of information and exchange of ideas.

RESEARCH

Research in the Department of Otolaryngology is encompassed in the work of six groups. These groups often work on cooperative projects resulting in the joint use of space and facilities.

The Eaton-Peabody Laboratory of Auditory Physiology has undergone construction to double its space and provide for two complete neurophysiology testing units and on-line computer. Dr. Nelson Kiang and his group have been working on the electrical responses of single auditory nerve fibers and single units in the cochlear nucleus. Dr. Kent Morest has joined the group to assist in defining more accurately the anatomy of the auditory neural system.

The staff of the Microcirculatory Laboratory under Dr. John Irwin has been concerned mainly with the microcirculation of the inner ear, including the formation and absorption of endolymph and perilymph, as well as the hemodynamics of pulmonary circulation. Dr. Peter Marfey and his group in the D. Harold Walker Laboratory of Biochemistry continue to be interested primarily in the three dimensional structure of proteins in solution.

In the Electronmicroscopy Laboratory, Mr. Robert Kimura has succeeded in producing endolymphatic hydrops in animals, which may open an entire new avenue of research into the cause of Meniere's disease.

The staff of the Histochemistry Laboratory under the direction of Dr. Karoly Balogh has shifted its interest from elucidating enzyme reactions in the normal inner ear to alterations existing in the pathological inner ear.

The Otopathology Laboratory under my supervision has been a very busy place. Six technicians are engaged in the histological preparation of temporal bones and brains of animals, the temporal bones of humans and the larynxes and paranasal sinus specimens of animals. The study of the pathological changes in the inner ears of patients with hearing losses who have willed their inner ears to science continues to be a main effort of this group. Dr. William Montgomery's laryngeal research studies and Dr. Bruce Warr's and Dr. Richard Gacek's neuroanatomy studies keep this laboratory alive with activity.

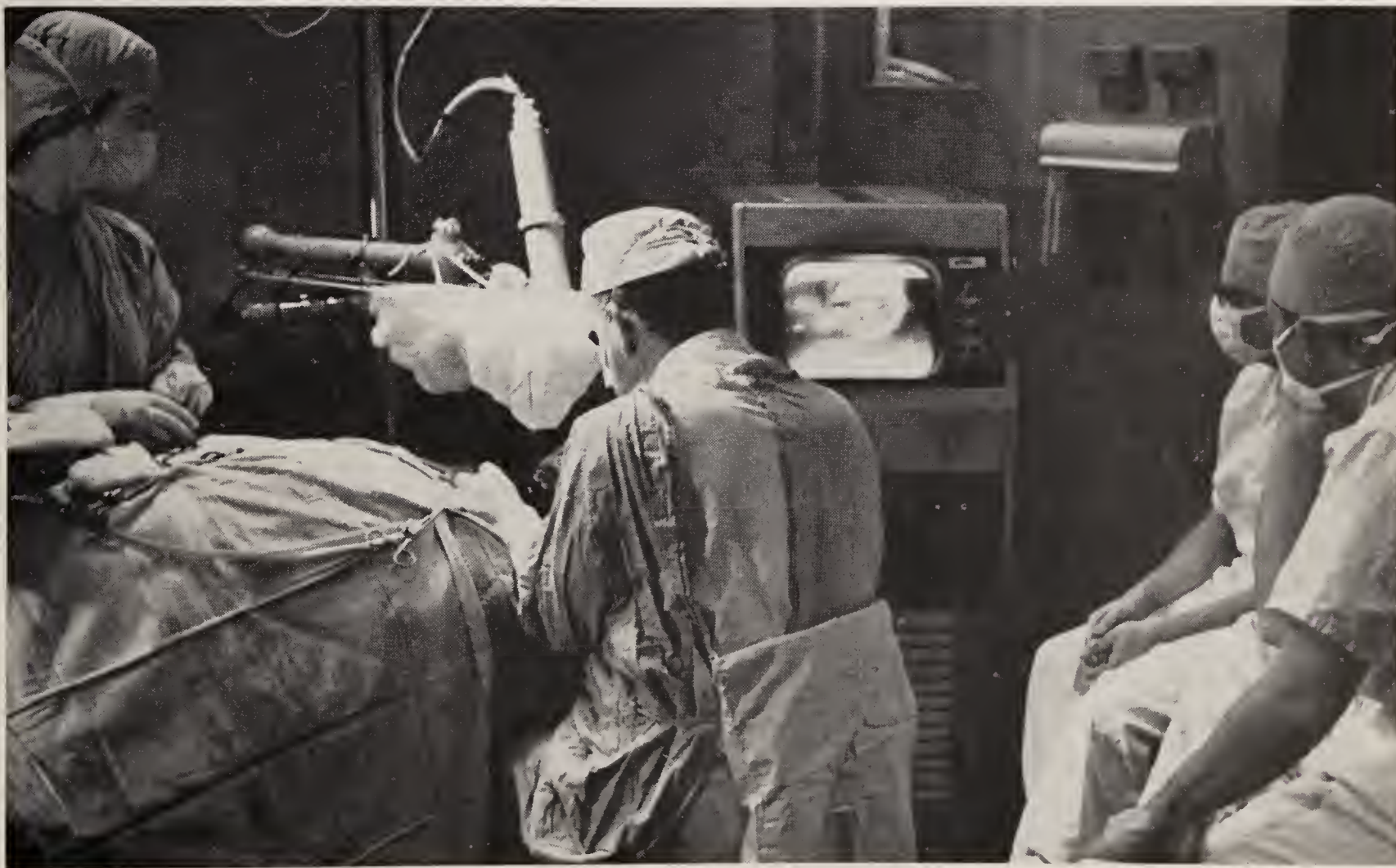
The research achievements by the residents have been most gratifying. Special credit is due to Dr. Eugene Meyers for his work on salicylate ototoxicity, to Dr. Joel Bernstein for his studies on blood supply to the inner ear, and to Dr. Herbert Silverstein for his biochemical studies on the inner ear fluids of animals and man.

OUR PROGRESS

Our progress in improving patient care and teaching and in making scientific contributions in our specialty has been gratifying. This has been due to the cooperative effort of a large staff. The influence of the Harvard Medical School and the Massachusetts General Hospital must not be underestimated, for they serve as a great stimulus to our staff. It is an unfortunate fact that to be healthy an institution or an organization must grow. It is questionable whether we can continue to grow without a substantial improvement in our hospital facilities. This is a first order of business for the future, for the staff must not be denied the opportunity to maintain professional and scientific leadership.

HAROLD F. SCHUKNECHT, M.D.
Chief of Otolaryngology

As a teaching hospital affiliated with the Harvard and Tufts Medical Schools, the Infirmary plays an important role in the training of medical students. Here a group of students watch a stapedectomy procedure by closed-circuit TV.



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October 1, 1964—September 30, 1965

DEPARTMENT OF OTOLARYNGOLOGY

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March 18, 1894 — March 18, 1965

1930 — Consulting Bacteriologist

1930 — Ophthalmic Resident

1932 — Clinical Assistant in Ophthalmology

1934 — Assistant Surgeon in Ophthalmology

1945 — Associate Surgeon in Ophthalmology

1948 — Surgeon in Ophthalmology

1954 — Senior Consulting Surgeon in Ophthalmology

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